A Results-Based Forest and Range Practices Regime for British Columbia

Discussion paper for public review and comment

2399-1

BRITISH COLUMBIA

A Results-Based Forest and Range Practices Regime for British Columbia

> *"I have emphasized the importance of economic development and restoring a vibrant economy. We will not, however, achieve economic development at the expense of a sustainable environment."*
>
> *—Premier Gordon Campbell*

When our government was elected, we promised bold and decisive action to open up government, to rebuild the economy and to lead the way to a New Era full of promise and potential for all British Columbians.

Forests have historically been our single-most important source of wealth so our vision included a leading-edge forest industry that is globally recognized for both its productivity and its environmental stewardship.

This discussion paper outlines the policy work that has been done to fulfil one of the key promises that will help us achieve this vision—to establish a workable results-based Forest Practices Code, with tough penalties for non-compliance.

The new code is part of a forest policy framework that will lead to a competitive market-based forest industry in British Columbia, one that reflects a high level of commitment to environmental and economic responsibilities, and that provides stability for forest workers and their families.

The Challenge:

For too long, the forest industry has been captured in an inefficient and ineffective legislative maze that has required companies to simply satisfy process requirements. It is time to cut that regulatory burden to enable a competitive market-based forest industry in British Columbia.

There may have been a time when heavy government oversight was seen as essential to protect forest values and public interests. Today, audits and certification initiatives are solid proof that industry has the knowledge and the incentive to do its job properly.

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The Opportunity:

It is time to shift our emphasis from processing paper to protecting forest values. Under a results-based code, government will set legal standards to protect the full array of forest values found in British Columbia.

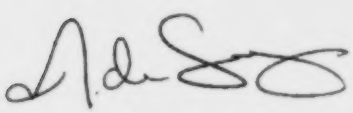
We will measure performance against these standards. We will not tell companies how to do their job; we will tell them what we expect them to achieve. And we will make sure they do it.

One point that must be emphasized is that we will maintain our existing high environmental standards. Residents of this province and people around the world expect us to protect environmental values, and we will meet that expectation.

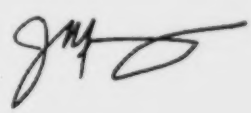
We said we would deliver a scientifically based, principled approach to environmental management to ensure sustainability, accountability and responsibility. The results-based code will help us meet that commitment.

This discussion paper and the supporting documents we are releasing represent our policy work so far. It is the start of a detailed consultation process that will continue to June 30, and will ensure we hear from anyone with an interest in a modernized results-based code.

We encourage you to offer your comments and views on this proposed results-based approach to forest management in British Columbia. Those views will help shape the legislation that we intend to introduce this fall.



Michael de Jong
Minister of Forests



Joyce Murray
Minister of Water, Land
and Air Protection

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A Results-Based Forest and Range Practices Regime for British Columbia

1.0 Introduction

This document summarizes the proposed policy framework being designed in support of new forest and range practices legislation for British Columbia. The document reiterates government direction and outlines the reasoning behind the revision of forest practices legislation. The proposed legal framework for a results-based forest and range practices regime is described, including an outline of the management regime by forest and environmental resource value. A summary of the proposed compliance and enforcement regime is provided.

An initiative to revise forest and range practices legislation requires consultation with those who have a stake in forest resources and their management.

Forest practices in British Columbia are of substantive public interest due to the broad social, economic and environmental implications associated with forestry activities. An initiative to revise forest practices legislation requires consultation with those who have a stake in forest resources and their management. The Government of British Columbia is committed to a public examination of this proposed policy framework to enable identification of critical policy proposals and issues of concern. Information from this consultation will inform final crafting of policy, and development of legislation.

The Government of British Columbia is committed to addressing First Nations issues regarding forestry activities in the province and the relationship of those activities to their interests. The government will continue to work with First Nations to find mechanisms that will assist in resolving these issues and will continue to meet legal obligations that it has in respect to First Nations interests. Industry will be encouraged to play a greater role in facilitating First Nations involvement in the planning process. The Government of British Columbia will also continue to encourage First Nations' involvement in land and resource planning and management.

Public consultation will begin in May, and continue to June 30, 2002. The consultative process is being facilitated by Dr. George Hoberg, Head of the Department of Forest

This discussion paper and supporting information can be viewed at www.resultsbasedcode.ca

Resources Management, University of British Columbia. This discussion paper can be viewed at **www.resultsbasedcode.ca** and comments submitted directly to Dr. Hoberg who will compile the results of public consultation and submit them to government by Aug. 1, 2002.

New legislation will be introduced to the legislature in the fall of 2002, and implementation will commence in April 2003. More detailed information on elements of this discussion paper is available on the results-based code Web site.

The existing Forest Practices Code is a complex policy framework.

2.0 Government Direction Regarding Forest Practices Legislation

The existing Forest Practices Code (the Code) is a complex policy framework consisting of an enabling Act (the Forest Practices Code of British Columbia Act), 19 sets of regulations that govern practices, seven cited (legally binding) guidebooks and 35 guidebooks that specify non-binding management practices.

When the Code was introduced in 1995, it was primarily a planning-based regime. The planning regime was intended to consider impacts to forest and environmental values, and design means to mitigate these impacts prior to forest development and management activities. Originally, there was a requirement for licensees to prepare six operational plans for review and approval, of which three had to be approved prior to harvesting. This heavy government oversight was considered necessary to ensure that the broad public interest in forest management was being protected and to build public confidence in forest management.

The Code achieved its original objectives of creating a level playing field for all forest licensees, increasing environmental protection and applying consistent enforcement measures. However, the Code had unintended consequences, notably increased costs for industry and government. Accountability for the outcomes of forestry activities was unclear. Further, certain key components of the Code were not fully implemented, leading to uncertainty for forest resource management, environmental conservation, and industrial development.

The Code has been revised over time to reduce costs by placing less emphasis on plan approvals and more on results (e.g. by eliminating three operational plans under Bill 47). However, costs remain a problem for both licensees and government. The prescriptive nature of the Code has stifled innovation by requiring adherence to practices that were not always the most effective nor efficient in delivering outcomes needed to meet the broad public interest.

In the spring of 2001, a new government administration was elected. The new government voiced a New Era commitment to "streamline the Forest Practices Code to establish a workable, results-based Code, with tough penalties for non compliance".

Consistent with that commitment, the Ministry of Forests, supported by the Ministry of Sustainable Resource Management and Ministry of Water, Land and Air Protection, led the development of a results-based forest practices regime to meet the objectives of:

- reducing the transactional and operational costs to industry;
- reducing the Code's complexity;
- providing the forest industry "freedom to manage" in delivery of defined results;
- maintaining the Code's high environmental standards;
- continuing to balance social, environmental and economic interests;
- maintaining and enhancing the level of public acceptance of forest management;
- consistency with the resource capacity of government; and,
- strengthening the compliance and enforcement regime.

Key assumptions guiding this initiative are as follows:

- There will be no joint statutory decisions. A single decision maker will allow clear focus of accountability for any authorizations associated with a results-based regime.
- Forest licensees will accept greater responsibility and accountability for delivery of required results.
- There will be no requirement to submit site level plans for government review and approval.
- Guidebooks will not be cited in legislation, but will be part of the non-legal realm to support the standard of due diligence for professional conduct.

A key objective is to maintain the Code's environmental standards.

The results-based regime will be crafted to be measurable, auditable, and enforceable.

- The results-based regime will be crafted to be measurable, auditable, and enforceable.
- The results-based regime will employ existing policy that balances environmental conservation with timber supply.

Government recognizes that other industrial sectors, including mining and oil and gas, also have operations in provincial forests. The government is committed to encouraging these activities in an environmentally responsible manner for the benefit of British Columbians. The development of the results-based regime will be done so that:

- Accepted forest practices will apply to the sub-surface resource sector where appropriate.
- Activities of overlapping forest, range and sub-surface tenure holders will be co-ordinated and a process for addressing any resulting issues defined.
- Wherever feasible, all appropriate regulatory authority will reside with the agency authorizing the non-forestry industrial activity.
- Unintended impacts of the new results-based regulatory regime to non-forestry tenure holders are minimized.

2.1 Role of Resource Agencies

The Ministry of Forests will retain responsibility for review and approval of a Resource Development Permit, issuance of cutting and road development authority, and compliance and enforcement. MOF will also monitor the effectiveness of the legislation in achieving stated objectives and will publicly report on indicators of Sustainable Forest Management.

The Ministry of Water, Land and Air Protection will perform an important role within the results-based regime. In a number of key areas, WLAP will be leading development of best management practices, operational expectations and standards for achievement of results, and will lead establishment of legal objectives for water quality, Ungulate Winter Range and identified wildlife. WLAP will monitor achievement of results, and will monitor and report on indicators of the state of the environment, and will be responsible for compliance and enforcement of environmental standards.

The Ministry of Sustainable Resource Management will be responsible for leading strategic planning to balance social, economic and environmental interests in land use, and will be

establishing landscape level zones and objectives. MSRM will be capitalizing on initiatives in communities and within the forest industry to deliver these products.

3.0 Legal Framework

The key principle of a results-based forest and range practices regime is that licensees will manage risks associated with achieving specified results, and that government will hold licensees accountable for achieving those results.

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Government believes that specific focus on results is the best way to hold licensees accountable for their actions and decisio ns. Under the Code, government oversight for plan approval and regulatory prescription meant it shared accountability for the outcome of approved forest development. Shared accountability confuses compliance and enforcement initiatives, and increases costs to both government and industry. Public confidence is eroded when there is lack of clarity on what exactly was to be delivered, and by whom.

Continual improvement in the performance record of licensees, evidenced by the general trend in Forest Practices Board audits and the certification initiatives of many licensees, suggests that risks associated with a shift to a results-based regime are manageable. In strengthening the compliance and enforcement regime by clearly defining accountability, government can intervene where appropriate and impose penalties for non-compliance. This approach will create a strong incentive for licensees to properly manage risks in light of objectives for environmental and forest values.

The proposed results-based regime described in this document is only one of many models that might have been developed to meet government direction. The possibility that more effective and efficient models exist is recognized and respected. To that end, a continuous improvement process will accompany development and implementation of results-based legislation. Continuous improvement will adjust the regime to ensure that it continues to serve the needs of society. The results of effectiveness monitoring and concepts from new science will inform continuous and purposeful improvement of this regime.

A results-based regime requires a clear definition of results and specified consequences of not achieving t these results.

The legal framework for a results-based forest practices regime required consideration of the following cultural shifts:

Prescriptive legislation and regulation
TO
legal standards that specify the results to be achieved and rules to be followed.
Government oversight and approval of multiple operational plans
TO
a single Resource Development Permit approved by government if it meets legal tests.
Detailed operational plans with extensive content requirements
TO
simplified RDP content, with emphasis on results, not planning.
Assessments required by law
TO
assessments being chosen by proponents to demonstrate due diligence in plan approval and result delivery.
Legal requirement f ofessional signoff
TO
professionals, governed by their own legislation, chosen by proponent to inform diligent delivery.

3.1 Components of the Legal Framework

The foundation of a results-based regime requires two fundamental cornerstones. At one corner there must be clear definition of results: what is to be achieved and where it is to be achieved. This cornerstone comprises landscape level objectives, result statements, or rules that will effect the required outcome. The opposing corner specifies the consequences of not achieving specified results and comprises a compliance and enforcement regime. The matrix binding the two cornerstones consists of limited statutory authority to authorize development to occur, or to order certain things to be done, and a non-legal realm of science and management practices that establish the standard of due diligence in achievement of results.

The legal framework consists of three main pillars:

1. **Landscape level location (and intensity) controls comprising:**
   - spatially explicit land use zones that specify where something is to be achieved, and
   - land use objectives that specify what is to be achieved within each zone, or interim zones and objectives that

would be employed in circumstances where a default is needed in the absence of established objectives.

2. **The Resource Development Permit that has:**
   - content specified in law, and
   - is approved by a District Manager if it meets tests specified by law.

3. **Site or stand level practice standards including:**
   - results—specific measurable outcomes relevant at a site or stand level;
   - rules—which specify how something must be done;
   - statutory powers to order certain things to be done to effect an outcome—or to certify that certain things have been done (e.g. establishing a free-growing stand);
   - notification and information requirements to support the orderly conduct of forest stewardship including audits and monitoring; and,
   - a compliance and enforcement regime to hold licensees accountable for delivery of results.

The Resource Development Permit has content specified in law and must meet tests specified by law.

The nature of each pillar of the legal framework and its components is described in the sections that follow.

4.0 Landscape Level Zones and Objectives

Landscape level zones and objectives will operate as controls on the location and intensity of forest development. These controls are an essential component of a results-based management regime as they will state what result is to be achieved, and where resource management must be effected at the landscape level for certain values.

The zones will specify where on the landscape something is to be achieved for a specific value. Objectives for each zone will specify what is to be achieved in terms that are measurable, or will at least define the forest attributes that must be retained to address requirements of the value. Objectives may also play a role in specifying stand level results, such as for some Ungulate Winter Ranges and identified wildlife.

A forest licensee will have to demonstrate that the RDP will achieve objectives for zones in the plan area.

Land use zones and objectives will be established by the MSRM, which has been charged with determining the social, environmental and economic balance between competing land uses and public interests.

The Resource Development Permit will be tested against these controls. A forest licensee who expects issuance of an RDP will have to provide evidence to demonstrate that the RDP will achieve objectives for zones located in the area encompassed by the plan.

Spatially explicit land use zones and objectives are integral to the effective working of a results-based regime. The long-term goal is for relevant land use zones and objectives to be delivered in partnership with forest licensees and others under MSRM-sponsored planning processes. However, all parties recognize that this goal cannot be met immediately and, therefore, the results-based regime will incorporate legally binding, quantitative interim objectives that will be in place during the transition period. Considerable progress has been made toward the completion of land use plans around the province at a broad strategic scale through Land and Resource Management Plans and at the more detailed landscape/watershed scale through Sustainable Resource Management Plans. MSRM will continue to work closely with forest tenure holders and other stakeholders to ensure that the transition to province-wide legal zones and objectives is as brief as possible.

Appendix 1 lists the land use zones and objectives required to support the proposed results-based forest management regime. As noted, it may not be possible for all zones and objectives required by the results-based regime to be legally established when the new legislation is implemented. In the absence of zones and objectives there must at least be interim zones and objectives to provide surrogate controls for RDP testing until such time as legal zones and objectives can be established. Interim zones and objectives will be designed to address unacceptable risks to certain values in the absence of legal objectives. Interim zones and objectives will only exist for the period of transition between implementation of the results-based regime, and legal establishment of zones and objectives.

It is crucial that landscape level zones and objectives be clearly articulated, quantitative and spatially explicit. If this is not the case, there will be no common understanding of what is to be

achieved, no possibility of certainty or efficiency in operational planning, and a potential for significant costs in attempting to craft evidence to support proposed forest development.

It must be recognized that in general, most LRMP statements are not currently suitable to support implementation of this results-based regime. LRMP zones and objective statements may not be legally established in the manner required to direct forest operational planning, and are typically not sufficiently measurable nor are they spatially explicit. There is an urgent need to locate and interpret LRMP products at the landscape level, even where they may already carry legal weight. Interim zones and objectives will be applied for key values where explicit zones and quantitative objectives have not been established.

It is crucial that landscape level zones and objectives be clearly articulated, quantitative and spatially explicit.

5.0 The Resource Development Permit

A draft of proposed legislation for the Resource Development Permit and its content is provided in Appendix 2.

The RDP process applies to:

- major licensees and similar categories of licensees and
- the government's Timber Sale Program (the TSP).

In the case of major licensees and similar categories of licensees, the licensee submits a proposed RDP to the District Manager in order to acquire an option to develop an "area of interest," which is called a development unit. Development can include harvesting timber, building forest roads, or both. The District Manager will issue an RDP to a licensee, thereby giving them an option to develop the units in the RDP, if these units:

- do not conflict with the tenures or legal rights conferred by government on other parties;
- are consistent with landscape level zones and objectives;
- recognize and address specified hazards; and,
- are designed with due consideration of public concerns.

The government's TSP will also submit a proposed RDP in order to acquire an option to develop the development unit identified in the RDP, by building forest roads and advertising

An RDP issued to a licensee cannot confer rights that are greater than those granted in the tenure agreement itself.

and awarding Timber Sale Licences. As in the case of an RDP issued to a licensee, the District Manager will issue an RDP to the TSP if the units meet same criteria noted above for major licensees.

There are three main types of development units:

1. A unit that will be developed into what will essentially become a single cut block, where the primary development activity will be timber harvesting.

2. A unit that will be developed into multiple cut-blocks and connecting roads, where development activities will include both timber harvesting and road construction.

3. A unit that serves as a corridor to connect other units, where a road will be constructed within it.

When an RDP is issued by the District Manager, the development units in the RDP confer options to harvest timber and/or build forest roads within the units. In the case of a licensee, these options are subject to the terms of the licensee's tenure agreement, and are exercised through the cutting permit/road permit process.

Cutting permits and road permits provide notice of intent to proceed with development activities within a particular development unit. Cutting permits and road permits also fulfil administrative functions under the tenure agreement and the Forest Act. It is important to note that an RDP issued to a licensee cannot confer rights that are greater than those granted in the tenure agreement itself.

Provided harvesting and/or road construction are consistent with the rights conferred in the tenure agreement itself, and the requisite appraisal data has been provided for the purpose of setting a stumpage rate, cutting permits and road permits (including the requisite timber marks, etc.) must be issued for the intended development. In other words, once the RDP has been issued, a licensee will not have to provide further proof that the proposed development meets the tests set out in section 5.3, which are the only tests required to obtain authority to occupy and conduct activities in a development unit.

In the case of the TSP, the option to develop a unit in an RDP is conferred for the purposes of providing opportunities for harvesting through the award of Timber Sale Licences. Road

construction for the purpose of providing access to timber may be carried out by the TSP under a road permit. However, the actual right to harvest timber and in some cases, carry out associated road construction, will be exercised by the licensee who acquires the Timber Sale Licence.

Consultation with First Nations must take place in accordance with MOF's consultation guidelines.

The District Manager may refuse to issue an RDP if not satisfied that consultation with First Nations has been consistent with the requirements of the MOF consultation policy and guidelines.

An RDP issued to a licensee will have an effective term of one to five years, as selected by the licensee. At any time during the term of the RDP, the option to develop a unit can be exercised through the cutting permit/road permit process. However, as soon as development has concluded, the licensee must release its option over the remainder of the unit.

Similarly, an RDP issued to the TSP will have an effective term of one to five years, as selected by the TSP. At any time during the term of the RDP, the option to develop a unit can be exercised through the road permit process (for the purpose of developing access to the timber) or through the advertising and award of a Timber Sale Licence. However, as soon as the development has concluded, the TSP must release its option over the remainder of the unit.

If, before the expiry of the RDP, the option to develop a particular development unit in an RDP has been exercised through a cutting permit or road permit, or through the award of a Timber Sale Licence, then this option is unaffected by the expiry of the RDP. On the other hand, if a licensee or the TSP has not exercised its option to develop a unit prior to the expiry of the RDP, then the option to develop expires with the expiry of the RDP. However, the licensee or the TSP could resubmit the unit for consideration in a new RDP against the tests discussed above.

There will be no provision to extend an RDP, although a new RDP may be proposed at any time.

A number of licensees can jointly submit a single RDP that covers operations over a common land area. There are no limits on the number of development units that may be proposed in an RDP, although all units in the RDP must meet the applicable tests. If multiple licensees are developing a single development

All timber harvesting and road construction within a development unit, must comply with the results and rules specified in the Code.

unit, the respective rights of the different licensees will be confirmed through the cutting permit/road permit process.

All timber harvesting and road construction within a development unit, regardless of whether it is carried out under a cutting permit, road permit or a Timber Sale Licence, must comply with the results and rules specified in the Code. These results and rules are described in section 6.2.

5.1 Who Can Submit a Resource Development Permit?

If a major licensee, or the government through the TSP, wishes to develop an area for commercial forestry purposes they must submit an RDP. The major licensees who can propose development in an RDP include, among others, Tree Farm Licensees, Forest Licensees (including those less than 10,000 m^3), and the holders of Timber Sale Licences with an AAC over 10,000 m^3. In addition, holders of Woodlot Licences and Community Forest Licences must also submit an RDP, if they wish to propose development.

Range development will be proposed through a Range Use Plan described in the range management regime.

Other industries such as oil and gas, or mining exploration and land development interests will not be required to submit an RDP.

5.2 Content of the Resource Development Permit

The content of an RDP will consist of a geo-referenced map, at a scale satisfactory to the District Manager, showing the proposed location of development units. The map must be prepared to a standard that it is meaningful to the District Manager when applying the tests set out in the next section. Similarly, the evidence provided in support of the map, in order to demonstrate that these tests have been met, must also be meaningful to the District Manager in light of these tests.

The map will delineate the outer boundaries of proposed development units. These outer boundaries must encompass the full extent of the proposed development activities. However, it is not necessary to provide the specific location of any particular timber harvesting and/or road construction activity. These specific locations do not have to be identified until the option to develop conferred under the RDP is exercised through a cutting permit or road permit—or, in the case of the TSP, through the award of a Timber Sale Licence.

However, in some cases, a limited number of details regarding development activities proposed for certain development units must be included by the licensee in a table appended to the RDP map. This provision will apply to determinations under Test #2 for block sizes and for Test #4, both described in the next section. If a particular development unit is located in a community watershed, a table attached to the map might specify certain development strategies that will be employed to meet the test. For example the RDP would include a table describing the amount of the forest cover that will be retained within a forest development unit to address terrain hazards or cumulative hydrological impacts.

The standard of proof required to satisfy the District Manager will be commensurate with the degree of risk to the values or interests at stake.

5.3 Resource Development Permit Tests

Prior to issuing an RDP, the District Manager must be satisfied that the proposed RDP meets four tests. The onus is on the licensee or the TSP to demonstrate that each test has been met. If the evidence submitted in support of the proposed RDP is sufficient to satisfy the District Manager that the RDP meets each test, then the RDP must be issued.

The standard of proof required to satisfy the District Manager is commensurate with the degree of risk to the values or interests at stake. The licensee or the TSP may have to provide stronger evidence if the District Manager expects the required outcome may not be achieved.

The tests are described as follows:

1. A test to confirm that development units in an RDP do not conflict with tenures or other legal rights that the government has conferred on other parties in the area.
   - The test will be applied commensurate with the nature of the rights held by the other party or parties. In this regard, it is important to note that simply because rights overlap, it does not necessarily mean they conflict. A conflict only occurs where activities proposed in a development unit in an RDP would prevent the exercise of other legal rights.
   - In circumstances of overlapping or adjacent rights causing conflict, the District Manager may consider evidence that an agreement has been reached to accommodate the interests of the affected party or parties. The District Manager will not act as an adjudicator for conflict resolution. The onus is on the licensee or the TSP to satisfy the District Manager that this test has been met.

The proposed locations of development units must meet each of the legal objectives for land use zones covered by the RDP.

2. A test that determines if the proposed locations of development units meet each of the legal objectives for land use zones covered by the RDP.
   - Spatially explicit zones with measurable objectives that are legally established by government will act as controls on the location and intensity of proposed development.
   - A licensee will submit evidence that proposed development is consistent with the uses specified for the zone in question and meets the measurable objectives for the zone.
   - The District Manager will be given authority to establish proportional old-growth targets for multiple licensees operating in one zone to ensure that the zone objectives will be met. Licensees may wish to submit a single RDP for a common land area.

3. The test to determine that, with regard to proposed development units in the RDP, the licensee followed an appropriate consultation process to gather and consider information from local communities and other interested members of the public.
   - A licensee must employ a process of public consultation that occurs well in advance of RDP preparation.
   - This consultation process will not be a forum for debating land use decisions.
   - The consultation process must provide an opportunity for any member of the public to have their views considered, but does not give them a veto or control over the proposed development. A licensee's efforts to accommodate public issues and concerns will be an important part of the licensee's evidence submitted to support an RDP.
   - The package of evidence that a licensee submits in support of a proposed RDP will be publicly available, with the exception of certain confidential and proprietary information.
   - Test #1 addresses third-party legal rights.

4. For community watersheds and watersheds with significant downstream fisheries values, a test where the District Manager must be satisfied that the licensee has identified terrain hazards in the watershed, and properly located forest development units relative to these hazards. In addition, the District Manager must be satisfied that the licensee has identified cumulative hydrological impacts and

hazards in these types of watersheds, and has proposed forest development units that will not result in further impacts nor increase risk to channel integrity, water quality, water quantity, or timing of flow.

- All other risks relative to specific hazards are addressed either directly through Test #2 above, or through the results and rules discussed later in this paper.
- Licensed domestic water users are accommodated under Test #1.

The District Manager must be satisfied that the licensee has identified cumulative hydrological impacts and hazards in community watersheds and watersheds with significant downstream fisheries values.

5.4 Amendments in the RDP Process

The RDP process is designed to avoid the amendments currently required under the Forest Practices Code. Provisions for amendment will not be prescribed in the legislation. Operational activities conducted by a licensee or the TSP must occur within the boundaries of development units delineated in an issued RDP.

If a licensee or the TSP wishes to pursue activities outside of the boundaries of a development unit in an issued RDP, they may submit a new RDP covering the areas that are outside the boundaries. However, in order to pass RDP tests, the cumulative impact of the proposed new RDP in addition to the currently issued RDP would have to be taken into consideration. Alternatively, the licensee or the TSP could abandon any currently issued RDP in favour of a new RDP that describes the total extent of their revised operational activities.

Goal statements will articulate the desired outcome for each value.

6.0 Results-based Management Regimes for Specific Forest and Environmental Values

6.1 Development of Results-based Management Regimes by Value

The following steps were taken to develop results-based regimes for forest values currently addressed under the Forest Practices Code.

1. A **goal statement** was established for each value. These statements exist solely to articulate the desired outcome for each value and will have **no legal standing.** The outcomes will be used as the basis for continuous evaluation and improvement of the results-based code. Attainment of these outcomes is expected to be influenced by government policy that balances the impact of conservation on timber and forage supply.

2. If the objective or result for a value could be compromised by the magnitude and intensity of development proposals across the landscape, a **resource development permit** test would be considered. This test will be applied when a statutory decision-maker (SDM) is considering approval of a licensee's proposed development activities as set out in an RDP.

3. An enforceable **result** was then developed. Results will be a key component of legislation. Licensees who fail to deliver these results will be subject to compliance and enforcement actions. The nature of compliance and enforcement activity will be complex, as it will be carried out against specified outcomes, and will require employment of resource specialists to determine the appropriate level of diligence that should have applied given the circumstances of each occurrence.

4. **Rules** were then developed to support results that were not clearly measurable or to provide further controls or protections beyond results if needed to assert the public interest.

6.2 Description of Results-based Management Regimes By Value

6.2.1 Landscape Level Biodiversity

The integration of forest stewardship with biodiversity conservation entails management of the following landscape scale attributes:

a) retention of old forest

b) seral stage distribution

c) landscape connectivity

d) temporal and spatial distribution of cut-blocks.

Two other key components of a biodiversity conservation regime are stand structure and tree species composition. Stand structure is primarily managed through silviculture practices (section 6.2.7), wildlife tree and coarse woody debris retention (sections 6.2.2 and 6.2.3), while species composition is addressed in silviculture practices.

A. Retention of Old Forest

Goal Statement:

Forest development will conserve the representation of old forests consistent with land use objectives and policy that balances biodiversity conservation with social and economic considerations.

Cross-reference: See RDP Approval Test #2 under Section 5.3.

Prior to issuing an RDP, the District Manager must be satisfied that the RDP retains sufficient old forest to meet land use objectives.

- Sufficient old forest cover must remain in a specified landscape zone (BEC variant within a landscape unit) to meet the requirements as laid out by land use objectives.
- In the absence of objectives, interim objectives in the legislation will specify the amount of old forest representation that must remain.
- The interim objectives will address situations where a particular landscape zone does not contain sufficient old forest to meet the objective.

Exemption:

The District Manager will be able to exempt an RDP from having to meet interim old forest objectives in the following circumstances:

Harvesting activities will retain old forest and other seral stages consistent with land use objectives established by government.

Forest harvesting will emulate the temporal and spatial disturbance of openings created by natural disturbance.

- when necessary to address a forest health factor;
- when necessary for road development;
- where no reasonable and cost-effective alternative exists; or,
- when necessary to achieve timber supply objectives as per existing code impact policy.

B. Representation of Other Seral Stages

Goal Statement:

Forest harvesting will conserve other seral representation consistent with land use objectives and policy that balances biodiversity conservation with social and economic considerations. There will be no management of other seral stages unless specified by land use objectives.

Cross-reference: See RDP Approval Test #2 under Section 5.3.

Prior to issuing an RDP, the District Manager must be satisfied that the RDP retains sufficient other seral representation to meet land use objectives. Test considerations for other seral objectives will be similar to those for old forest and there will be no interim objectives. Objectives, and their application, will be consistent with current policy.

C. Landscape Connectivity

Goal statement:

Where objectives for landscape connectivity have been legally established, features contributing to landscape connectivity will be conserved. The objectives and management regimes for a number of other values will contribute substantively to conserving landscape connectivity.

Cross-reference: See RDP Approval Test #2 under Section 5.3.

Prior to issuing an RDP, the District Manager must be satisfied that the RDP demonstrates consistency with legally established landscape connectivity objectives.

D. Temporal and Spatial Distribution of Cut-blocks

Goal Statement:

Provide the opportunity for forest harvesting that will emulate the temporal and spatial distribution of openings created by natural disturbance, and will prevent forest fragmentation consistent with objectives that balance biodiversity conservation with social and economic considerations.

Cross reference: See RDP Approval Test #2 under section 5.3.

1. Where objectives have been legally established, the District Manager must be satisfied that forest development units are designed to result in cut-blocks that contribute to achievement of patch size objectives.

2. Where objectives have not been established, the District Manager must be satisfied that forest development units will result in cut-blocks that do not exceed:

   - 40 ha for the Vancouver, Kamloops and Nelson Forest Regions
   - 60 ha for the Prince George, Prince Rupert and Cariboo Forest Regions

3. Where a licensee has developed a landscape design for the area of an RDP that is demonstrated to achieve the intent of the goal statement, the District Manager must be satisfied that forest harvest units are consistent with the objectives of that design.

4. In all cases, the District Manager must be satisfied that cut-blocks within a proposed RDP will achieve objectives for other resource values.

The District Manager must be satisfied that cut-blocks within a proposed RDP will achieve objectives for other resource values.

Test limitations and considerations:

1. A cut-block may not be harvested adjacent to an opening that has not achieved green-up standards unless the combined opening size is less than prescribed limits.

2. The green-up standard will be 3 m unless otherwise specified in objectives established by MSRM.

3. A licensee preparing an RDP may include a table to support a determination that describes opening sizes to be achieved within a forest harvest unit or notes the exemption criteria that apply within the unit.

Exemption:

1. The District Manager may exempt a forest harvest unit within an RDP from having to meet prescribed cut-block size limits if harvesting is to be conducted to sanitize an area of infested timber or to salvage timber damaged by fire, wind, insects or similar factors, as long as:

   - the cut-block incorporates the structural characteristics of natural disturbance, or

Wildlife trees will be retained after harvest that consist of ecological suitable trees in the quantity described by regulation and in a distribution that reflects natural patterns.

- the silviculture system is other than clearcut or seed tree and will retain 40% or more of pre-harvest basal area well distributed across the opening.

2. The District Manager may increase the green-up standard if it is believed that a different limit is necessary for hydrologic reasons, to manage wildlife values, or to manage recreation or scenic values or for other similar reasons.

6.2.2 Wildlife Trees

Goal Statement:

All harvest areas will retain ecologically suitable wildlife trees in quantity, quality and distribution typical of naturally occurring stand structure.

Result:

Wildlife trees will be retained after harvest that consist of ecological suitable trees in the quantity described by regulation and in a distribution that reflects natural patterns.

Rules:

1. Wildlife tree retention levels, as specified by regulation or set as a land use objective by government, must be applied as an average for cut-blocks within a landscape unit by sub-zone with some retention associated with every cut-block.

2. The retention objective must be met by the end the term of the RDP.

3. No person can harvest designated wildlife trees without authorization and designation of a replacement area.

Exemption with condition:

Designated wildlife trees can be harvested to address a forest health factor (e.g. windthrow damage, bark beetle infestation) if:

- approved by the District Manager, and
- replacement wildlife trees with similar structure and amount are located as close as practical to the harvested trees.

Information requirement:

Refer to the information requirements for the silviculture regime (section 6.2.7).

6.2.3 Coarse Woody Debris

Goal Statement:

All harvested sites will retain ecologically appropriate coarse woody debris in a quantity, quality (size, species, decay class) and distribution typical of natural forest conditions, considering other resource management goal statements.

Result:

Coarse woody debris will be left dispersed on the site after harvest. This retention will include large pieces that can last the full rotation. Coarse woody debris retention will be balanced with other resource management objectives and results.

6.2.4 Management of Visual Quality

Goal Statement:

Forest development activities will achieve visual quality objectives within scenic areas.

Result:

Forest harvesting and road construction will achieve VQOs or interim objectives established for polygons within scenic areas established by government.

6.2.5 Forest Health

Goal Statement:

Forest health management will protect provincial forest and range resources and will maintain productivity by minimizing losses and mitigating future risks to provincial forest and range resources from forest health factors and invasive plants.

Results:

1. The licensee must conduct activities to detect forest health factors in a timely manner.
2. The licensee must conduct activities that will address identified forest health factors.
3. The licensee's management practices must not exacerbate the negative influence of forest health factors on the productivity of the land-base.
4. Management of forest health factors will occur in a manner that will result in achievement of objectives or results for other values.

Forest health management will minimize losses and mitigate future risks from forest health factors and invasive plants.

Licensees must identify and document the presence of forest health factors and invasive plants, and develop management strategies.

Rules:

1. A person transporting and storing timber must prevent or minimize the spread of forest health factors or invasive plants.

2. A person who uses trap trees or pheromones to concentrate insect populations must ensure that the insect brood is destroyed before the insects emerge.

3. A person carrying out a forest and range practice must take action in a timely manner to prevent, minimize, or contain the spread of forest health factors including invasive plants.

Exemption:

1. Where otherwise prohibited by law, the District Manager may set conditions to allow sanitation harvesting of infested timber in riparian areas, sensitive ecosystems, areas adjacent to non-green-up areas in order to reduce the spread of damaging pests.

2. A licensee may be exempted from meeting certain land use objectives or achieving specified results when in receipt of an order to manage forest health factors.

3. Minor sanitation harvesting (less than 2000 m^3, or 5 ha) to manage endemic occurrences may occur without an RDP.

Statutory Powers:

1. Certain officials will have the authority to declare a forest health emergency and require licensees to employ measures to prevent or contain the spread of forest health factors.

2. These officials will have authority to order licensees to implement appropriate treatment on specified areas to prevent damage or destruction of timber by forest health factors.

3. A regional manager may issue an order to a person to immediately treat forest health factors on private land that pose a risk to adjacent Crown land, and require that this person comply with the order.

Notification and Information Requirements:

Licensees must identify and document the presence of forest health factors and invasive plants, and develop management

strategies. They must make this documentation available to the District Manager on request.

Licensee roads on the provincial forest land base will be structurally sound, stable and safe.

6.2.6 Roads, Stream Crossings and Access Management

Goal Statement:

Roads that are constructed, maintained, or deactivated on the provincial forest land base will be stable, safe for users, and will achieve results and objectives stated for forest and environmental values.

Results:

1. Construction and maintenance and deactivation of roads, pioneer or tote roads, landings, bridges and any other form of watercourse crossing will result in roads, drainage systems and crossings that are structurally sound, stable, safe for users, and will, where relevant:
   - prevent slope failures and landslides, and minimize the introduction of silt to watercourses;
   - maintain water quality;
   - maintain stream channel integrity;
   - maintain surface drainage patterns;
   - conserve wildlife habitat including riparian vegetation;
   - prevent harmful alteration, damage or destruction of fish, fish habitat or fish passage; and,
   - prevent degradation of water quality at the water supply intake in a community watershed.
2. Deactivation of a road will result in:
   - limiting access on the road to motor vehicle traffic consistent with legal objectives;
   - restoration of natural drainage patterns;
   - removal of bridge and log culvert superstructures;
   - removal of bridge or log substructures if the failure of a bridge or log culvert substructure would affect downstream values;
   - removal of all stream culverts and restoration of fish passage and protection of fish habitat; and,
   - re-establishment of ecologically suitable vegetation that will protect soil and, where applicable, provide forage and control invasive plants.

The licensee is whoever is authorized to construct or deactivate a road, landing or crossing, or is required to maintain it.

Road construction works must be outside a riparian management area, except at stream crossings, unless there are no practical options or there is a higher risk to resources.

Rules:

1. Drainage systems must be functional during construction of a road.

2. Road construction works must be outside a riparian management area, except at stream crossings, unless there are no practical options or there is a higher risk to resources.

3. Equipment crossings of a stream during road construction must be at one location only.

4. The clearing width for a road, and width of the finished road prism, must not exceed that required for user safety and operational requirements.

5. The clearing width for a road at stream crossings cannot be widened to accommodate bridge or culvert material storage sites, landings and equipment turn around sites.

6. Exposed soil that will support vegetation must be re-vegetated, to provide for soil erosion protection and control of invasive plants.

7. Fuel, lubricants and servicing fluids must be controlled or contained.

8. Rock that is from an acid-generating rock formation must not be used for road surfacing and ballasting unless acid generation is mitigated.

9. Rock blasting and handling must not damage resources adjacent to the worksite.

10. A person who constructs and maintains a road must construct bridges, stream culverts and their approaches that will pass the peak flows set out in the following table:

	Minimum design peak flow
All stream culverts	100-year return period
Permanent bridges	100-year return period
Temporary bridges	50-year return period

Except that:

(a) A stream culvert may be constructed at a crossing to meet the expected flow during the period of use if:

- the stream is not a fish stream;
- the installation and use will be in a period of low stream flows;
- there will be no future crossings in this location; and,
- the culvert is removed before the period of high flows, and

(b) A bridge may be constructed at a crossing to meet the expected flow during the period of use if the pieces at risk are removed before the periods of high flows.

11. Downloaded bridge ratings signs must be installed on all bridge approaches, if the bridge cannot support the design vehicle load for the road.
12. The licensee must duly notify all users of potential risks to public safety resulting from their activities and will provide appropriate notice to water purveyors of road construction or deactivation works in a community watershed.
13. Bridge design and fabrication must conform to the Canadian Standards Association, Design of Highway Bridges, CAN/CSA-S6, and the Canadian Foundation Engineering Manual.
14. The licensee must inspect steel and concrete bridges at least once every three years, and log bridges at least once every two years.

The licensee must inspect steel and concrete bridges at least once every three years, and log bridges at least once every two years.

Cross reference: See RDP Approval Test #2 under section 5.3 Prior to issuing an RDP, the District Manager must be satisfied that an RDP will meet land use zones and objectives set by MSRM for forest road access management.

- These objectives will be set for landscape scale areas by MSRM where access on forest roads represents a hazard to forest and environmental resources, or where such access must be managed to meet land use objectives.

Statutory powers:

1. SDMs may issue an order compelling a licensee to do certain things to address risks of imminent and catastrophic impact on public health, safety or the environment. Failure to comply with the order could result in enforcement action.
2. SDMs will have authority to determine if structures have

Silviculture activities will sustain or enhance the productive capacity and value of the land and forest for timber and non-timber resources at the stand and landscape levels.

been adequately designed with respect to public safety hazards, or risks to the environment.

Information Requirement:

Inspection records, and materials fabrication and construction data, will be maintained for the life plus one year of any bridge structure, and will be submitted to successive licensees.

6.2.7 Silviculture

Goal Statement:

Silviculture activities will sustain or enhance the productive capacity and value of the land and forest for timber and non-timber resources at the stand and landscape levels.

Results:

1. For every area for which a licensee holds a reforestation responsibility, they must establish and maintain a healthy, well-stocked and free-growing stand with no less than the required minimum well-spaced stems per hectare of commercially valuable trees that are ecologically suitable to each site. Free-growing standards will be established in regulation.

2. Licensees must achieve government's land use objectives for non-timber values.

3. When using partial cutting, licensees must take all reasonable measures to protect site and stand productivity, commercial value, and non-timber values where specified by legal objectives.

4. A licensee must sustain plant community representation and tree species composition typical of the ecosystem at the landscape level. Where legal zones and objectives for species composition are set, those objectives prevail.

5. Livestock that are used for site preparation or vegetation management must not adversely affect other forest values.

Rules:

1. The licensee must submit a free-growing declaration and evidence of this statement to the District Manager.

2. Where forest health factors may affect the health of a required tree species, the licensee must use resistant seed sources, seedlings or vegetative propagules if they are

available, and take any other actions necessary to ensure trees established for the purposes of a free-growing stand will remain healthy.

3. A person who carries out a silviculture treatment and uses fertilizer must store, handle and apply the fertilizer in a manner that protects forest resources. In a community watershed, fertilizer must not be applied closer than 100 m upslope of a water supply intake or within 10 m of a perennial stream.

4. Prior to harvest, a licensee may submit a request for a variance to the free-growing standards where site specific conditions prevent the achievement of the standards.

5. The maximum density for any block will be 10,000 stems per hectare unless the regional manager approves a different standard considering ecological, social and environmental objectives.

Exemption:

1. Licensees may choose to propose alternate stocking standards to be approved by government.

2. Where a treatment would be more appropriately carried out after the late free-growing date, the licensee may request approval to delay declaration of free growing where all other provisions of free growing have been met with the exception of the treatment. The licensee must prepare a rationale which will be available upon request but is limited to situations such as:

- brushing of deciduous species where undertaking the treatment prior to free growing would result in a failure to achieve free growing;
- reducing the density of trees where undertaking the treatment prior to free growing would result in poor crop tree selection; or
- other similar rationale.

Provided approval is granted, the liability of licensees will be limited to the successful completion of the treatment.

Information Requirement:

The licensee must submit each year to the District Manager on or before May 31, a report describing the silviculture treatments completed in the area for the preceding year ending

The licensee must submit an annual report describing the silviculture treatments completed in the preceding year.

The licensee must manage gene resources such that acceptable levels of genetic diversity, within and among species, are conserved.

March 31 including:

- a summary of the silviculture activities carried out by the licensee, including the regeneration method, year of establishment, estimated species composition at establishment, and estimated density at establishment.
- a summary of the stand tending activities carried out by the licensee.
- land status and forest cover information including wildlife trees, and a map immediately post harvest, at age 5, and at free growing.

Note:

Pesticide use is administered under the Pesticide Management Act.

6.2.8 Gene Resources

Goal Statement:

The objective of results-based gene resource management is to retain sufficient genetic diversity essential to allow adaptation to environmental change and to avoid indiscriminate movement of seed and vegetative material resulting in poorly adapted regeneration.

Results:

1. The licensee must sustain the productive capacity and value of timber and non-timber resources across the landscape through the use of best genetic material available at time of seedlot selection.

2. The licensee must ensure genetic diversity will be conserved such that genetic adaptation capability is maintained in response to environmental factors and forest management over time, including regeneration genetically adapted to the site.

3. The licensee must manage gene resources such that acceptable levels of genetic diversity, within and among species, are conserved.

Rules:

1. The licensee must use only registered seed and vegetative lots for Crown land reforestation.

2. The licensee must keep a record of the registration numbers of the seed and vegetative lots used and the

locations where they are planted.

3. A person involved in processing and/or disposition of cones, seeds and vegetative material collected from Crown land (or licensed orchards on private land) must be in possession of a Seed and Vegetative Material Dealers Licence.

4. The licensee must deploy stand and landscape level seed and vegetative material according to the conditions of registration and land use objectives.

5. A person must not collect cones, seed or vegetative material unless in possession of a Cone, Seed and Vegetative Material Collection Permit.

6. A licensee who is required to re-establish a stand of trees must store tree seed with the MOF.

Statutory Powers:

1. The Chief Forester, or a designated authority, will have the ability to prevent or limit the removal of cones, seed or vegetative material from British Columbia.

2. The Chief Forester, or a designated authority, will have authority to order licensees to implement appropriate gene resource management measures.

3. The Chief Forester, or a designated authority, will have the ability to specify identified gene resource management genotypes and require their storage with the MOF.

Information Requirements:

The licensee must submit each year to the District Manager on or before May 31, a report describing the gene resource management activities completed in the area for the preceding year ending June 30 including:

- a summary of the seed and vegetative lots used in reforestation activities carried out by the licensee, including the registered seed and vegetative lot identification numbers and quantities planted;
- a summary of the planting location (SPZ, BEC, latitude, longitude and elevation range); and,
- any other gene resource management information as required by the District Manager.

The Chief Forester, or a designated authority, will have the ability to prevent or limit the removal of cones, seed or vegetative material from British Columbia.

Forest harvesting, site preparation and range activities will protect soil properties, including the physical, chemical and biological attributes in addition to the natural drainage patterns of the site.

6.2.9 Soil Conservation

Goal Statement:

Forest harvesting, site preparation and range activities will protect soil properties, including the physical, chemical and biological attributes in addition to the natural drainage patterns of the site.

Results:

Forest harvesting, site preparation and range activities will result in soil properties that will allow:

- establishment of a commercially valuable and ecologically suitable stand of trees and under-storey on the net area to be reforested at least equal in productivity to the stand that was harvested;
- avoidance of soil erosion; and,
- prevention of delivery of soil into streams and other water bodies.

Rules:

1. Following the completion of harvesting and site preparation operations, and rehabilitation, soil disturbance must not exceed the following proportions of the net area to be reforested:

   a) 5% per ha for sensitive soils

   b) 10% per ha for all other soils

   In areas where silviculture systems will require multiple harvesting entries within a rotation, the limits are:

   a) 10% per ha for sensitive soils

   b) 15% per ha for all other soils

2. The level of soil disturbance can temporarily exceed the limits in rule #1 to construct temporary access structures, if these structures and the soil conditions on these sites are suitable for rehabilitation, such that the total soil disturbance levels that can occur during operations are as follows:

   a) 10% per ha for sensitive soils

   b) 15% per ha for other soils

   These additional temporary access structures must be rehabilitated within one year of the completion of harvesting operations such that the total soil disturbance limits do not exceed the limits specified in rule #1.

3. Per-hectare soil disturbance will apply to any portion of the net area to be reforested that has an area of 1 ha or larger, and
   a) a minimum width of either 100 m or
   b) the width of the standards unit, if the standards unit is less than 100 m wide.

4. An increase to the soil disturbance limits in rules #1 and #2 above may occur to the minimum extent necessary to accommodate:
   a) previous harvesting damage, including trails that are unusable or
   b) the following operations and treatments, if site productivity and surface and subsurface drainage of the site can be maintained:
   i stumping operations;
   ii mechanized vegetation control treatments required for backlog reforestation, salal-dominated ecosystems or establishment of a commercial broadleaf species;
   iii salvage of windthrow; and,
   iv other similar operations.

5. Despite rule #1 above, and any limit under rule #4, the following areas of soil disturbance must be rehabilitated, or in the case of subsection (a) must have natural drainage patterns re-established, within one year after the completion of harvesting operations:
   a) an area of soil disturbance that may concentrate or channel surface and subsurface water in such a way that it is likely to cause sedimentation or diversion of water onto sensitive terrain;
   b) any road or landing that is a temporary access structure; and,
   c) an excavated or bladed trail, unless the trail is required for silviculture systems that require multiple harvesting entries, or all the following apply:
   i) the area occupied by all excavated or bladed trails amounts to less than 1% of the net area to be reforested;
   ii) the excavated or bladed trail is less than 30 m in length; and,
   iii) natural surface drainage is not impeded by the excavated or bladed trail.

Certain areas of soil disturbance must be rehabilitated within one year after harvesting operations are completed.

A person must not construct an excavated or bladed trail on an area that is within a community watershed if the properties of the soil make it highly susceptible to erosion, and there is a likelihood that sediment will enter streams.

6. A person must not construct an excavated or bladed trail on an area that is within a community watershed if the properties of the soil make it highly susceptible to erosion, and there is a likelihood that sediment will enter streams.

7. A person, other than a holder of a woodlot licence, must ensure that the area of a cut-block that is occupied by permanent access structures, other than permanent trails, does not exceed 7% in total.

8. A person may increase the limit in subsection 7 to the minimum extent necessary to accommodate more road or landing area if:
   - the cut-block is less than 10 ha;
   - the cut-block has topography and engineering constraints which limit options for road location and development;
   - the cut-block straddles access structures which pre-existed the cut-block; or
   - other similar reasons exist.

9. A forest officer may exempt a person who carries out timber harvesting from rehabilitation requirements, if the forest officer is satisfied that:
   - there is insufficient area affected or occupied to warrant treatment;
   - treating the area affected or occupied is unlikely to restore soil productivity, or
   - treating the area affected or occupied will create an unacceptable risk of further damage or harm to or impairment of forest resource values.

Information Requirement:

1. A map of any area within the net area to be reforested that contains:
   - sensitive soils or
   - an area where a person has increased the maximum soil disturbance limit in accordance with rule #4, with the reason and the limit stated.

If a person has increased the maximum limit for permanent access structures in accordance with rule #7, they must state the reason and what the limit is.

6.2.10 Terrain Hazard Management

Goal Statement:

Forest development will be conducted in a way that will not cause landslides, adverse gully processes and snow avalanches that place human life at risk, and that can damage public and private property and forest resources, including water quality in community watersheds.

Forest development will be conducted in a way that will not cause landslides, adverse gully processes and snow avalanches that risk human life or can damage property.

Cross-reference: See RDP Approval Test #4 under Section 5.3.

The location of proposed forest development units in the RDP will be tested relative to terrain hazards in community watershed or watersheds that have significant downstream fisheries values.

Result:

Forest and range practices will not cause or create conditions that will result in landslides, adverse gully processes, snow avalanches or destabilization of alluvial fans where those events may:

a) place human life or safety at risk;

b) damage public or private property including land, buildings, roads, bridges, utilities and other structures;

c) damage timber plantations;

d) damage drinking water quality, water supply intakes, or water supply infrastructure, or reduce water quantity; or

e) result, either directly or indirectly, in harmful introduction of sediment to fish habitat.

Rules:

1. A person whose forest practices cause landslides, adverse gully processes or snow avalanches, or destabilize an alluvial fan must promptly report any such events, and must carry out any emergency measures that are necessary to prevent or mitigate further damage if an emergency situation is considered to exist such that there is likely to be a loss of life or property or significant environmental damage.

2. A person must not clear cut in a community watershed if there is a moderate or high likelihood of landslides with a high risk of landslide debris entering directly into streams, unless exempted by the District Manager.

Forest and range activities will conserve fish, fish habitat, water quality, quantity and timing of flow in community watersheds and watersheds that have significant downstream fisheries values.

3. A person must not harvest in an area within a community watershed if the area is subject to a high or very high likelihood of landslides.

Statutory Power:

An official will be empowered to order a licensee to do certain things if there are observations of harvesting or road construction activities on or adjacent to areas with terrain hazards that represent a potential threat to public safety, property or other values as specified in the result.

A draft of possible legislation for terrain management is provided in Appendix 3.

6.2.11 Community Watersheds/Watersheds With Significant Downstream Fisheries Values

Goal Statement:

Forest and range activities will conserve fish, fish habitat, water quality, quantity and timing of flow in community watersheds and watersheds that have significant downstream fisheries values. These practices will protect channel integrity, will meet objectives for water quality, quantity, timing of flow, and will ensure that forest and range activities do not impair a purveyor's ability to provide potable water.

Result:

Forest and range practices will be conducted in a manner that will:

- not introduce deleterious substances to streams;
- meet community watershed objectives at the water supply intake;
- maintain water quality, water quantity and timing of flow within the range of natural variability;
- protect channel integrity; and,
- maintain natural drainage patterns.

Rule:

Licensees must comply with specifications to achieve objectives that are described in a table that a licensee appends to the RDP. See description of Test #4 in section 5.3.

Cross Reference: See RDP Approval Test #4 under section 5.3.

- Prior to issuing an RDP that encompasses a community watershed or watersheds that have significant downstream

fisheries values, the District Manager must be satisfied that the licensee has identified terrain hazards in the watershed, and properly located forest development units relative to these hazards.

- In addition, the District Manager must be satisfied that the licensee has identified cumulative hydrological impacts and hazards in the watershed, and has proposed forest development units that will not result in further impacts nor increase risk to channel integrity, water quality, water quantity, or timing of flow.
- If the watershed is in a degraded state, the licensee's activities will contribute to restoration of the watershed.
- RDP Test #1 protects the rights of licensed domestic water users.

Note:

- Community watersheds will be designated by MSRM.
- The Regional Manager, Environmental Stewardship (WLAP) will designate watersheds with significant downstream fisheries values.

6.2.12 Riparian Management

Goal Statement:

Stream channel dynamics, aquatic ecosystems, fish and fish habitat and the water quality of all streams, lakes, and wetlands will not be harmfully impacted by forest and range activities.

Stream channel dynamics, aquatic ecosystems, fish and fish habitat and the water quality of all streams, lakes, and wetlands will not be harmfully impacted by forest and range activities.

Results:

Forest and range practices in riparian areas will result in:

- maintenance of the integrity of stream channels, banks, and gully side walls and natural bed-load dynamics;
- assurance that deleterious substances are not introduced to streams;
- conservation of the nutrient, large organic debris, and detritus and forage cycles in aquatic ecosystems;
- protection of fish and fish habitat;
- maintenance of water quality within the range of natural variation;
- conservation of the diversity and productivity of wildlife habitat including ecosystem connectivity;
- conservation of vegetative diversity in riparian ecosystems;

Forest practices will comply with riparian reserve zone and management zone widths as specified in regulation.

- a management zone that protects the integrity of a reserve zone;
- maintenance of the natural variation of water temperatures in streams;
- sufficient streamside tree retention for temperature sensitive streams; and,
- retention of under-storey vegetation and non-commercial trees adjacent to stream channels except at stream crossings or in the use of prescribed fire.

Rules:

1. Forest practices will comply with riparian reserve zone and management zone widths as specified in regulation. The regulation will reflect current provisions.
2. There must be sufficient trees retained in a management zone to meet the results.
3. Accumulations of woody debris or slash on the site or physical disturbance to the site will not result in damage to a stream, wetland, lake, fisheries sensitive zone or water supply installation.
4. Stable natural material that contributes to stream channel integrity will not be destabilized or removed.
5. A person must not harvest or modify trees in a riparian reserve zone unless exempted.
6. A person carrying out harvesting must not yard or skid timber through or over a stream unless the yarding or skidding will achieve the results for the riparian area.
7. A person carrying out helicopter, balloon or another type of harvesting must not use as a log drop area
   a) the littoral zone of a marine or fresh water system,
   b) water that is less than 10 m deep, or
   c) a marine-sensitive zone.
8. Trees in a riparian reserve zone that represent a safety hazard must be incorporated into no-work zones within the riparian management zone where practical. If such trees must be felled, they cannot be harvested.

Exemptions:

1. Felling only may occur in a riparian reserve zone where it is demonstrated that can be achieved, the felling is authorized by the District Manager, and the felling is for one of the following purposes:
   a) undertaking recreation facility management by government;
   b) removal of trees for approved stream crossings;
   c) removal of trees for the construction or modification of a road;
   d) creating corridors for full suspension yarding;
   e) carrying out construction, modification or maintenance of a range development;
   f) sanitation treatments to manage bark beetle infestation; or
   g) any other similar activity.
2. A statutory power will authorize an SDM to exempt a licensee from rule #1. The licensee would have to bring forward evidence of an acceptable alternate strategy to achieve the results. A statutory power of intervention will allow government to intervene if there is a significant risk that the result will not be achieved by the alternative strategy.

Statutory Power:

Temperature sensitive streams will be designated by the Regional Manager, Environmental Stewardship.

6.2.13 Ungulate Winter Range

Goal Statement:

Forest cover and forage will be conserved over an area necessary for winter survival of ungulate species, recognizing regional variance in the ecology of ungulate species.

Forest cover and forage will be conserved over an area necessary for winter survival of ungulate species.

Result:

Forest and range practices will maintain forage and cover attributes necessary for winter survival of ungulate species as specified by Ungulate Winter Range objectives, or interim objectives, set by government.

Government may enter into agreements with licensees to use information from their plans as the basis for these objectives.

Species at risk will be protected from further loss, extirpation or extinction that may result from forest and range practices.

Resource Development Permit Test:

Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with land use objectives or interim objectives established by WLAP for areas specified as Ungulate Winter Range by WLAP.

- The test will apply against landscape scale location and retention parameters established by WLAP.
- Interim objectives will be consistent with current agreements between MOF and WLAP on timber supply and biological need.

Statutory Power:

WLAP will designate Ungulate Winter Ranges and set objectives, including interim objectives. Some Ungulate Winter Ranges may be managed through objectives set by MSRM.

6.2.14 Identified Wildlife

Goal Statement:

Through the provincial identified wildlife management strategy, species at risk will be protected from further loss, extirpation or extinction that may result from forest and range practices.

Result:

In carrying out forest and range practices, licensees must maintain ecosystem attributes necessary for the survival of identified wildlife.

Rule:

The legislation governing forest and range practices will require the licensee to comply with general wildlife measures for a wildlife habitat area or specified ecosystem unit.

Cross reference: See RDP Approval Test #2 under Section 5.3.

Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with objectives established by WLAP for species at risk that are designated by WLAP as identified wildlife. Zones will identify wildlife habitat areas, or ecosystem units where general wildlife measures apply. The objectives or general wildlife measures established for these areas, will constitute landscape level objectives for the purpose of Test #3.

Statutory Powers:

WLAP will be the agency charged with designating a species at risk as identified wildlife and establishing wildlife habitat areas, specified ecosystem units and general wildlife measures. In addition, some identified wildlife, as well as other important wildlife species, may be protected through other land use objectives established by MSRM. Government may enter into agreements with licensees to use licensee information as the basis for these objectives.

A statutory power of intervention will allow government to intervene if there is a significant risk that the result for identified wildlife will not be achieved by the alternate strategy.

Exemption

A statutory power will authorize a WLAP designate to exempt a licensee from the rule.

6.2.15 Resource Features

Goal Statement:

Forest and range practices will protect resource features.

Results:

Forest and range practices will not result in damage to resource features.

Rules:

Forest and range licensees must document and report the location of resource features and actions taken to protect them.

Statutory Power:

Government officials will have authority to identify other resource features.

Exemption:

The District Manager may exempt, with conditions, a licensee from having to achieve the result for a specific feature.

6.2.16 Cultural Heritage Resources

Goal Statement:

Cultural heritage resources will be identified and appropriate management mechanisms established before forest or range practices may impact cultural heritage resources.

Cultural heritage resources will be identified and appropriate management mechanisms established.

Woodlots will be exempted from certain provisions that are not relevant to these small tenures.

Result:

The resource is to be managed in accordance with the Heritage Conservation Act where the resource is an archaeological site

The resource is to be managed in accordance with the legislation or with written direction from the District Manager if it is not an archaeological site.

6.2.17 Lakeshore Management

Goal Statement:

Fisheries, riparian, aesthetic, recreation and other important social and ecological values will be conserved adjacent to lakes greater than 5 ha.

Results:

Where objectives set by an SDM for lakes greater than 5 ha specify stand level retention requirements, forest and range practices will maintain forest cover representation consistent with those objectives.

Cross reference: See RDP Test #2 under section 5.3.

Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with objectives set by MOF regarding the location and intensity of forest development and range practices within a lakeshore management area.

6.3 Results-based Regime for Woodlot Licences.

The Woodlot Licence Forest Management Regulation will be eliminated and replaced by a results-based code, which contains specific provisions essential for efficient and effective administration of these small tenures. Since the regime for certain values is not relevant on woodlots, they will be exempted from certain provisions that would apply to larger tenures. This is not a lessening of environmental protection standards for woodlot licences, but simply a reflection of the relevance of certain provisions to a tenure containing up to 600 ha of Crown land.

Community Forest agreements covering up to 600 hectares of Crown land will also be subject to the same provisions as woodlots. Larger Community Forest agreements will be subject to the general provisions of the proposed results-based regime.

Woodlots will be managed under the results-based regime as proposed for the following values. The legal language for each value regime will be inclusive of woodlots:

- soil conservation (except there will be no maximum limits for permanent access structures)
- terrain
- roads and stream crossings
- community watersheds
- riparian management, including temperature sensitive streams and stream bank stability
- resource features
- lakeshore management
- visuals
- silviculture
- cutblock size and adjacency
- coarse woody debris

Woodlots will employ a slightly different approach for Ungulate Winter Range, identified wildlife and wildlife tree retention. The legislation must require an approach to setting objectives that minimize impacts to woodlot allowable annual cut (AAC):

- Ungulate Winter Range: The results-based management regime will apply as proposed except that woodlot AAC impacts will be explicitly considered in establishment of objectives for that portion of the UWR zone that is over a woodlot. UWR management plans can be sub-zoned in a manner that purposely shifts the more onerous aspects of UWR objectives away from the woodlot area to the extent possible.
- Identified wildlife: The results-based management regime will apply except that the design of wildlife habitat areas and forest retention objectives will be developed considering woodlot AAC impacts.
- Wildlife tree retention requirements will be calculated on the basis of the total woodlot licence area using the forest characteristics of the woodlot licence area and retention specifications set in regulation. A comprehensive plan for wildlife tree retention must be submitted as evidence to support an RDP.

A woodlot RDP will not be required to be tested against landscape level biodiversity objectives.

Woodlots will employ a slightly different approach for Ungulate Winter Range, identified wildlife and wildlife tree retention.

Unless otherwise approved by the District Manager, a woodlot RDP will have an effective term of 10 years to provide planning stability and certainty for woodlot licensees.

Unless otherwise approved by the District Manager, a woodlot RDP will have an effective term of 10 years to provide planning stability and certainty for woodlot licensees.

Forest health harvesting is critical on interior woodlot licences. A mechanism to authorize such harvesting must exist outside of the RDP process for bona-fide forest health situations (blowdown, fire-killed timber, insect infestation, ice damage, flooding, etc.). There should be minimal extraction of healthy timber in the process of forest health harvesting. A mechanism similar to the recent amendments to the Woodlot Licence Forest Management Regulation will be employed to facilitate all types of priority forest health harvesting. This may include harvesting outside of the sustainable AAC.

Minor harvesting operations currently allow a woodlot licence holder to harvest minor amounts of healthy timber without requiring an FDP amendment. Provisions for minor harvesting operations should be included in legislation so that authorization to conduct minor harvesting operations can be carried out without being part of the RDP process.

6.4 The Management Regime for Range

The proposed legal framework for range management is similar to that proposed for timber but a Range Use Plan applies rather than an RDP. Landscape level controls would be similar where relevant to range activities.

The non-legislated framework would be similar, however, there would not be the same evidentiary basis for RUP acceptance or reliance on resource professionals outside government. Government would be sharing some accountability for delivery of results for range management, given the many small-scale range users of Crown forage resources.

The RUP would be the only document proponents prepare and submit for approval of livestock grazing and range development. RUPs will be subject to plan approval tests as outlined in Section 5.3. Information is required to indicate how additional desired plant community or other goals/strategies provided by the District Manager are being addressed. The RUP for grazing would consist of:

- a schedule that includes the range management activity planned, the location it is planned to occur on, and the

timing proposed (for livestock grazing, this would include the number and class of animals);

- activities to address goals/objectives provided by the District Manager;
- a map containing the Range Act agreement boundaries, existing range developments and intended area of use and locations of intended activities other than grazing; and,
- the signature of the tenure holder.

An RUP that includes hay cutting activities would include information on:

- the average stubble height for the area to be harvested;
- the intended area and date of harvest; and,
- a schedule of activities intended to address any additional goals/objectives relevant to hay cutting provided by the District Manager.

The management regimes for biodiversity, forest health, soil conservation, community watersheds, roads and stream crossings, terrain hazards, resource and cultural heritage features, lakeshore management, Ungulate Winter Range, and identified wildlife will be followed. The concept of Proper Functioning Condition will be applied for riparian areas in addition to the general regime for riparian management.

6.4.1 Some Specifics for Range Management

Goal Statement:

Forage quantity and quality will be managed consistent with objectives stated for forest and rangeland values. Range management will maintain healthy productive plant communities and will maintain water quality and quantity.

Result:

Range use practices will not result in deterioration of forage resource quantity and quality.

Rules:

1. A person carrying out a forest practice that negatively affects the usefulness of a natural range barrier must take action to restore an effective barrier.

2. A person cannot construct, remove or carry out a range development without the approval of the District Manager.

Range management will maintain healthy productive plant communities and will maintain water quality and quantity.

Licensees must carry out their activities at a time and in a manner that will mitigate the risk and spread of unwanted fire.

3. Range developments must be maintained by the tenure holder unless exempted by the District Manager.
4. A person cannot harvest forage without the approval of the District Manager.
5. Livestock used on Crown range must be marked as directed by the District Manager.
6. Dead livestock found within a community watershed must be removed in a timely manner.
7. Range practices must not result in livestock use in a riparian area of a community watershed if the use would result in fecal deposits, trampling of vegetation, deposit of sediments or exposure of mineral soil.
8. Range practices must not interfere with achieving or maintaining proper functioning condition of riparian areas.

6.5 The Regime for Fire Management

Goal Statement:

Values and resources on the land base will be protected from the risk of damage or destruction by fire caused by forest or range practices.

Result:

Licensees will not place human life at risk, damage property or infrastructure, adversely affect a watershed, or damage forest or range resources by failing to mitigate the risk of unwanted wildland fire.

Rules:

1. Licensees must carry out their activities at a time and in a manner that will mitigate the risk and spread of unwanted fire.
2. A person must undertake to rehabilitate any resources or lands damaged as a result of their fire control operations.

Exemption:

Providing that reasonable steps are taken to protect identified values at all times, a person who is required to carry out fire control operations is exempt from the resource protection requirements of this law until such time as an unwanted fire is considered to be under control.

7.0 The Compliance and Enforcement Regime

7.1 The Role of Due Diligence and Absolute Liability

7.1.1 Current Code

The current Code provides for a two-tiered enforcement regime -- a prosecution regime and an administrative remedies regime.

Currently, the Code provides for a two-tiered enforcement regime that includes both:

- a prosecution regime that empowers the Courts to sentence a person convicted of an offence under the Code to a fine, imprisonment, or both; and,
- an administrative remedies regime that does not rely on the Courts, but which instead provides government officials with a wide range of administrative enforcement options, including monetary penalties and remediation orders.

A primary purpose of the prosecution regime is to punish those whose conduct in contravening the Code warrants public censure. The prosecution regime is predicated on the belief that it is only appropriate to punish someone if they are at fault — that is, if their misconduct was either intentional or resulted from their disregard as to whether they complied with the law or not. For this reason, section 157(2) of the Code specifically states that due diligence is a complete defence to a prosecution. A person demonstrates due diligence if they can demonstrate that they have taken all steps that are reasonable in the circumstances of the situation to avoid breaking the law.

However, the Code is silent with respect to the role of due diligence in the context of the administrative remedies regime. As a result, three schools of thought have emerged:

1) due diligence is a complete defence to an administrative remedy;

2) due diligence is not a defence to an administrative remedy, nor is it a relevant consideration in deciding on the form and/or amount of an administrative remedy; and,

3) due diligence is not a defence to an administrative remedy, but it is a relevant consideration in deciding on the form and/or amount of an administrative remedy.

The results-based code will enhance what is already one of North America's most comprehensive compliance and enforcement regime regulating forest practices.

The first and second schools of thought represent opposite ends of a continuum. The third school of thought is a combined approach, which has been endorsed by the Forest Appeals Commission. Given its role as an appellate tribunal, which is empowered to hear appeals from administrative remedy determinations, the Forest Appeals Commission's perspective carries considerable weight. This perspective reflects the philosophy that administrative remedies serve two separate and distinct functions.

The first function is "to make the Crown whole" (i.e. to compensate the public for losses resulting from the tenure holder's failure to fulfill its legal obligations), and to eliminate "unjust enrichment" (i.e. profits made by a tenure holder as a direct result of a contravention). This function could be described as quasi-contractual in nature, reflecting the contractual nature of the bargain struck between the Crown as seller of resource development rights, and of the tenure holder as purchaser of those development rights.

The second function of administrative remedies is to regulate the performance of tenure holders to ensure they are observing a standard of care that is commensurate with the risks associated with developing public forest and range resources.

For this reason an administrative remedy, such as a monetary penalty, may include a deterrent component to sanction unacceptable performance. In this sense, then, the administrative remedy regime could be said to overlap to some extent with the prosecution regime. Still, the differences between a penalty with a deterrent component that is imposed by a government official and a sentence imposed by a Court upon conviction for an offence are significant.

Given the dual functions of the administrative remedies regime, it is important to distinguish between the compensatory and disciplinary components of an administrative remedy. If a tenure holder's conduct is not at fault, i.e. if the tenure holder has met the appropriate performance standard by exercising due diligence, a compensatory administrative remedy may still be appropriate, but a disciplinary or deterrent remedy would not. For this reason, the Forest Appeals Commission has found that even though due diligence is not a complete defence to an administrative remedy, it is a relevant consideration in determining the form and/or amount of the administrative

remedy. In particular, it will forestall the disciplinary or deterrent component of an administrative remedy.

Unfortunately, the blended nature of administrative remedies, i.e. their dual functions in assessing compensation and imposing discipline, has made accurate reporting on a forest company's performance almost impossible. At present, the Code provides no mechanism that would allow for a separation of these functions, so that only the disciplinary component of an administrative remedy would be tracked as part of a forest company's performance record.

To address this shortcoming, Bill 47 was passed by the Legislature in 1997 to allow for separate compensatory and disciplinary or deterrent remedies. Bill 47 also made it clear that if a forest company was not at fault, i.e. if it exercised due diligence, then it would only be subject to compensatory administrative remedies, which would not form part of its performance record. In other words, Bill 47 expressly referenced due diligence as a complete defence to the disciplinary or deterrent component of an administrative remedy. And in the absence of a disciplinary or deterrent penalty, the forest company would have a clean performance record, even though the company may have been required to compensate the Crown.

Finally, Bill 47 provided for straightforward formulae and methodologies for assessing compensation under the administrative remedies regime to make the process as fair, efficient and effective as possible. However Bill 47, which in essence codified the Forest Appeals Commission's combined approach to due diligence, was never brought into effect.

Absolute liability means licensees remain liable for failure to achieve the results specified -- even if they can demonstrate they exercised due diligence.

7.1.2 The Role of Due Diligence and Absolute Liability Under the Results-Based Code

Section 7.1.1 above referred to three schools of thought arising from the current Code's silence regarding the role of due diligence and absolute liability in the administrative remedies regime. They are:

1. Due diligence is a complete defence

This approach holds that neither tenure holders nor their contractors should be held accountable for a contravention of the Code if they were not at fault. This tends to bring both compensatory and deterrent administrative remedies under the

While due diligence is currently not a complete defence to an administrative penalty, it is a relevant consideration that may forestall a disciplinary or deterrent component.

same umbrella. In doing so, it largely ignores the Code's role in codifying the bargain between the government and tenure holders. Indeed, the arguments in favour of a complete due diligence defence appear to be based almost entirely on legal principles developed in the context of prosecution regimes and deterrent-based administrative remedies regime. These principles are applied to compensatory administrative remedies as if they are not fundamentally different from deterrent administrative remedies.

As a result, if this approach were to be adopted, the government—and hence the public—would end up bearing the entire risk of any failure on a tenure holder's part to fulfil its statutory obligations under the Code, provided the tenure holder could demonstrate that it exercised due diligence. In the context of a results-based code, this would mean that:

- tenure holders would not have to achieve the results specified in the legislation, i.e. they would only have to demonstrate they exercised due diligence in attempting to achieve those results; or
- if tenure holders were able to demonstrate that they exercised due diligence, they would have to be compensated in those cases where they were required to take additional steps to remedy a failure to achieve the results specified in the legislation.

In either case, there would be no contravention.

The single most important implication of endorsing this approach would be the fact that the government (and hence, the public owners of the resources) would be assuming liability for all no-fault contraventions. This liability is unquantifiable, but could be very significant. This in turn could lead to allegations that the government is subsidizing industry by assuming liabilities and risks that should properly be borne by tenure holders.

2. Due diligence is no defence

This approach can be summarized as follows:

- The distinction between fault and no-fault contraventions would remove absolute liability from the Code and, as a result, tenure holders would not be held accountable for damage to the environment.

- Introduction of a due diligence test for deterrent remedies would make administrative remedies more complicated and costly to impose. (This argument discounts the fact that due diligence is already being considered in keeping with the Forest Appeals Commission's findings that, while due diligence is not a complete defence to an administrative penalty, it is a relevant consideration that may forestall a disciplinary or deterrent component.)
- Government should remove even the possibility of mitigating factors, like due diligence, by providing for automatic deterrent penalties based on a philosophy of absolute liability that assumes every contravention warrants compensation **plus** some form of punishment.

Like the due-diligence-is-a-complete-defence approach, the due-diligence-is-no-defence approach would bring both compensatory and deterrent administrative remedies under the same umbrella. But while a tenure holder under the former would avoid both compensatory and deterrent administrative remedies through a complete due-diligence defence, the latter approach would not allow due diligence to be a defence to either, and would make a deterrent remedy mandatory in every case.

3. Combination of due diligence and absolute liability

This approach to due diligence and absolute liability reflects the balance between environmental, social and economic values adopted by the Forest Appeals Commission.

It tries to reflect the nature of the bargain between the government (as seller) and tenure holders (as purchasers) by crafting results that are fair and reasonable given the benefits obtained by forest and range tenure holders relative to the costs they would incur in meeting the results specified in the results-based code.

Where it is considered appropriate to hold tenure holders accountable for achieving these results, they are given maximum freedom in deciding how best to manage the associated risks—and with this freedom comes accountability. In this context, tenure holders would be absolutely liable for achieving the specified results, but only in a quasi-contractual sense. They could not avoid liability for compensating the Crown simply by demonstrating that they exercised due

When tenure holders are given maximum freedom to decide how best to manage risks, they also must accept accountability.

The government will be required to maintain a performance record for each licensee and for the government's own performance record under its Timber Sales Program.

diligence, but they could avoid a "black mark" on their performance record—and they could avoid any kind of disciplinary or deterrent administrative remedy.

In other cases, where it would be unfair to hold tenure holders accountable for achieving a particular result—either because the costs would far exceed any benefits they might receive or where there are too many unknowns for them to manage the risks effectively—the results-based code would continue to rely on a process-based approach. In other words, the government would retain a greater number of controls and, more important, it would also retain accountability for the outcome. In this context, tenure holders would simply be required to comply with the performance standards or rules specified in the legislation, which would essentially be due diligence standards. In these circumstances, the concept of absolute liability would simply not apply.

7.2 Other Proposed Changes to the Compliance and Enforcement Regime

a) Formulas will be used to determine the amount payable under the absolute liability provisions of the administrative remedies regime vis-à-vis different categories of affected forest resources to ensure the process is fair, efficient and effective.

b) The current prosecution process will be maintained, but the linkages with the administrative regime for deterrent penalties will be clarified to ensure that pure punishment remains the responsibility of the Courts.

c) The government will be required to maintain a performance record for each licensee and for the government's own performance under its Timber Sales Program. This will permit separating good performers from the poor performers, by identifying those who are unable to demonstrate they exercised due diligence. Performance records might also be useful to organizations that certify forest practices of companies and to customers interested in knowing about the forest practices of particular companies.

d) The government will be required to report on its compliance and enforcement activities (e.g. number of inspections, administrative penalties, tickets issued, number of seizures).

e) The wide range of administrative remedies available under the current Code will be maintained, and will be enhanced by creating a new statutory power that permits government to intervene proactively in certain situations where a contravention has not yet occurred.

f) A new obligation will be imposed on licensees to notify government when operations commence, when they are suspended and when they are completed. This will ensure government is able to more efficiently and effectively inspect and monitor operations.

g) Administrative reviews available under the current Code will be replaced with a process for the original statutory decision maker to reconsider their decision in some circumstances, based on new evidence. Alternatively, the affected party has the option to go directly to the Forest Appeals Commission.

In addition, the Ministry of Forests is restructuring its compliance and enforcement organization to maximize effectiveness and efficiency. MOF is proposing that government standardize the enforcement regimes in the Forest Act, Range Act, and results-based code to strengthen the overarching enforcement regime for forest resource management in British Columbia.

WLAP will maintain its compliance and enforcement role for environmental standards in the new results-based code.

Notwithstanding the proposed enhancements to the enforcement regime, government will continue to maintain a healthy balance between proactive compliance activities and reactive enforcement activities. Taking proactive measures can pay great dividends in efficiency and resource protection compared to a completely reactionary strategy.

WLAP will maintain its compliance and enforcement role for environmental standards in the new results-based code.

The results-based forest management regime has deliberately shifted to a culture where the responsibility to deliver results rests solely with the proponent.

8.0 The Non-Legislated Realm of the Results-based Regime

Complementing and supporting this results-based regime is a non-legislated forest management framework comprising all the processes or practices, means of information delivery, and guidance or direction that do not explicitly fit within the components of the legislation itself. How do these non-legislated components aid in delivery of exemplary forest and environmental stewardship?

The existence of something outside of the legislated framework does not diminish its significance in the overall stewardship regime. Things from outside the legislated framework can also have significant legal implications without being part of that framework. These things include, but are not limited to:

- best available science and inventory information;
- best management practices, guidebooks or operational expectations;
- standards documents (e.g. stocking, regenerations delay and free growing);
- assessments, including procedures and results;
- audit and monitoring results;
- planning documents such as Sustainable Forest Management Plans; and,
- professional signoff, and professional opinion, reports or documentation.

Professional signoff will not be prescribed legislation, nor will there be a requirement to use specified professional expertise, other than those required under professional enactments. The proponent will have freedom to select the expertise required to develop and craft the evidence for an RDP, and design strategies to deliver results. There is no need for this regime to regulate the actions of professionals active in forest development. The conduct of professionals in forest resource management will be governed by the legislation or codes of conduct applicable to each discipline.

The results-based forest management regime has deliberately shifted to a culture where the responsibility to deliver results rests solely with the proponent. Licensees are required to identify and manage risks, then devise and implement strategies to achieve results. Statutory powers are proposed that allow for

government to intervene prior to an outcome where deemed necessary to assert the public interest. In these situations, government would assume a share of the responsibility and accountability for the outcome. If the required result is not delivered, and the proponent cannot show diligence, there are consequences. Where a result is not achieved, failure to use the best science or best practices can work against a proponent in compliance and enforcement proceedings.

The non-legislated components of the forest stewardship regime can be used by resource professionals to identify and manage risk to forest and environmental resource values. Information from these sources can be used to:

- create the evidentiary basis required to pursue authorization of the RDP;
- influence the selection of practices for delivery of specified results;
- enable proof of one's diligence in attempting to deliver a result;
- establish and maintain the standard of due diligence; and,
- articulate the best available science when assessing due diligence.

It is important to recognize that placing science or best management practices in regulation:

- unduly constrains professionals in pursuit of innovation within boundaries of the law
- places the burden of accountability back on government;
- increases the regulatory burden; and,
- severely constrains government's ability to vary standards as science evolves.

The non-legislated components of the forest stewardship regime can be used by resource professionals to identify and manage risk to forest and environmental resource values.

9.0 The Forest Practices Board

The Forest Practices Board is an independent government agency with responsibilities under the existing Forest Practices Code. The government's Core Service Review has confirmed the importance of an independent watchdog for sound forest practices. Given the change to the forest practices regime, the Board will continue to provide assurance about the achievement of sound forest practices by conducting independent audits, investigating complaints, participating in appeals, and providing special reports.

Appendix 1

Land Use Zones and Objectives for the Results-based Forest and Range Practices Regime

Value	Lead Agency	Products
Landscape level biodiversity	MSRM	
Old growth		Target representation for old growth, OGMA locations.
Seral representation within which targets to be achieved.		Target representation for mature seral to be applied under policy, boundaries
Connectivity		Location and objectives for landscape connectivity features.
Temporal and spatial distribution of cut-blocks		Objectives for the distribution of patch sizes by natural disturbance type, boundaries of landscape areas within which objectives to be achieved
Wildlife tree retention	MSRM	Objectives for wildlife tree retention that may replace or improve on regulatory standards given new science or special circumstances of region or landscape.
Visual Quality Management	MSRM	Scenic area boundaries and appropriate land-use objectives.
	MOF	District Manager establishes visual quality objectives (VQO).
Silviculture	WLAP	Locations and objectives for specialized treatments for wildlife habitat conservation (e.g. grizzly bear stocking and pruning).
Water Quality	WLAP	Water quality objectives for community watersheds.
Identified Wildlife	WLAP	Consistent with policy, location and objectives for wildlife habitat areas, zones and objectives for implementation of general wildlife measures.
Ungulate Winter Range	WLAP	Consistent with policy, boundaries of winter ranges and objectives for forest cover retention.
	MSRM	Land use objectives for Ungulate Winter Ranges as applicable.
Lakeshores	MOF	Objectives for 200 m lakeshore zone (forest cover retention, recreation facilities, road management).
	MSRM	Objectives for greater than 200 m. lakeshore zone.
Access Management	MSRM	Specified zones or locations where forest road access must be managed to address other values, specified access parameters to be achieved (e.g. road density, scheduling of use, vehicular use).
Range	MSRM	Land use objectives as applicable.
Timber	MSRM	Targets regarding the availability of timber.

Appendix 2

Draft of Legislation for Resource Development Permit Content and Approval Tests

Resource development permit

1 The term of a resource development permit must

(a) be set out in the permit, and

(b) be at least one year and no more than five years, at the option of the person applying for the permit.

Issuance of resource development permits by district manager

2 (1) In this section, "forest development unit" means

(a) areas within which timber harvesting and related practices are proposed to occur, and

(b) access corridors, within which roads are proposed to be constructed, maintained or deactivated.

(2) The district manager must issue a resource development permit submitted under this Part if the district manager is satisfied with respect to the following:

(a) the proposed permit includes, for the area under the permit

(i) maps that have the following:

(A) a scale and format satisfactory to the district manager;

(B) topographic reference points;

(C) the outer boundaries of forest development units; and,

(ii) the signature of the holder of the agreement or a person who has authority to sign the permit on behalf of the holder;

(b) the proposed forest development units do not conflict with tenures or other legal rights granted by the Province in the area covered by the permit;

(c) the proposed forest development units meet the objectives for land use zones that apply to the area covered by those units;

(d) the person applying for the permit has solicited information from the public and has considered

any information received respecting the proposed forest development units;

(e) the proposed forest development units have been appropriately located with respect to:

(i) terrain hazards in community watersheds and watersheds with significant downstream fisheries values, and

(ii) cumulative hydrological impacts in community watersheds and watersheds with significant downstream fisheries values;

(f) the proposed permit does not contravene a provision of the Act or regulations.

(3) Before approving a permit or amendment the district manager may require the person applying for permit issuance to submit information that the district manager reasonably requires in order to determine if the permit or amendment meets the requirements of subsection (2).

(4) Despite subsection (2), the district manager may refuse to approve a resource development permit if satisfied that consultation with First Nations has not been consistent with the requirements of the Ministry of Forests consultation policy and guidelines, as specified in writing by the Minister from time to time.

Appendix 3

Draft of Legislation for the Terrain Management Regime

Terrain stability result

1 A person who carries out a forest practice under an agreement under the Forest Act or Range Act must not, as a result of that practice, cause, or create conditions that are likely to cause, any of the following events:

(a) a landslide;

(b) an adverse gully process;

(c) a snow avalanche;

(d) the destabilization of an alluvial fan,

if those events have, or may likely have, any of the following consequences:

(e) place human life or safety at risk;

(f) damage property including timber;

(g) adversely affect drinking water quality, or water quantity, or damage water supply infrastructure;

(h) result, either directly or indirectly, in harmful alteration of fish habitat

Terrain stability rules

2 (1) If a person who carries out a forest practice under an agreement under the Forest Act or Range Act knows of a landslide, gully erosion process, snow avalanche, or destabilization of an alluvial fan in the area where the person is carrying out the forest practice, the person must

(a) promptly notify the district manager, and

(b) take any measures necessary to prevent or mitigate imminent

(i) damage to property, including timber,

(ii) significant environmental damage, or

(iii) bodily injury or death.

(2) Within a community watershed a person who holds an agreement under the Forest Act or Range Act must not

(a) harvest timber in an area with a high or very high likelihood of landslides, or

(b) clearcut an area with a moderate likelihood of landslides if there is a high risk of landslide debris entering directly into streams, unless the district manager exempts the person.

(3) The district manager may exempt a person from subsection (2) (b) if satisfied that clearcutting the area will not significantly increase the likelihood of a landslide.

Appendix 4

Draft of legislation for the Identified Wildlife Management Regime

Identified wildlife rule

1 (1) A person carrying out a forest practice in a wildlife habitat area or specified ecosystem unit must carry it out in accordance with objectives or general wildlife measures established for application within the specified ecosystem unit or wildlife habitat area.

(2) The environmental stewardship manager may

(a) exempt a person from the requirements of subsection (1) if satisfied by the person

(i) that

(A) there is no reasonable way to carry out the forest practice in compliance with the general wildlife measures or objectives, and the person is mitigating the adverse effects of the forest practice on the habitat area or ecosystem unit to the extent reasonably possible to ensure the results will be achieved, or

(B) the identified wildlife will be protected to at least the same extent as if the person had carried out the general wildlife measures or objectives, and

(ii) that the results required by section 2 will be achieved, and

(b) make an exemption subject to conditions.

(3) A person exempted under subsection (2) must ensure that the identified wildlife are protected to at least the same extent as if the person had carried out the general wildlife measures or objectives, that the results required by section 4 are achieved, and that any conditions are complied with.

(4) If the environmental stewardship manager has reasonable cause to believe that a person who is exempted under subsection (2) will not achieve the results required by section 2, the environmental

stewardship manager may deliver a notice to the person requiring the person to

(a) carry out activities to achieve the result, or

(b) satisfy the environmental stewardship manager that there is no need for the person to carry out those activities, and the person must comply with the notice.

Identified wildlife results

2 (1) The holder of an agreement under the Forest Act or Range Act, must ensure that their forest practices protect species at risk from further loss, extirpation or extinction.

(2) The holder of an agreement under the Forest Act or Range Act, must ensure that their forest practices will mitigate any potential detrimental impacts and maintain ecosystem attributes that are necessary to ensure the survival or recovery of identified wildlife.

Identified wildlife and general wildlife measures

3 The Deputy Minister of Water, Land and Air Protection, or the Deputy Minister's delegate, may, by written order do the following:

(a) classify a species at risk as identified wildlife, if the species needs to be managed through a wildlife habitat area or general wildlife measure;

(b) establish a mapped area of land as a wildlife habitat area, if satisfied that the mapped area is necessary to meet the habitat requirements of identified wildlife;

(c) establish a management practice, that applies inside a wildlife habitat area, as a general wildlife measure, if satisfied that the management practice is necessary to maintain the identified wildlife within those areas;

(d) establish a management practice, that applies within a specified ecosystem unit as a general wildlife measure, if satisfied that the management practice is necessary to maintain a specified habitat.

A Results-Based Forest and Range Practices Regime for British Columbia

Backgrounder

Introduction

In its New Era document, the government made a commitment to "streamline the Forest Practices Code to establish a workable, results-based code, with tough penalties for non-compliance".

It promised a code that would maintain British Columbia's high environmental standards but would allow forest industry professionals to determine how best to deliver defined results—and back this with tougher compliance and enforcement. In other words, the new code would place more emphasis on end results than the process used to achieve the results.

Forest activities have broad social, economic and environmental implications for every British Columbian. The proposed policy framework for new forest and range practices legislation must be open to wide examination of critical policy proposals so that issues of concern can be raised and resolved before legislation is finalized.

Government staff have prepared a detailed results-based code discussion paper, and is inviting comments until June 30, 2002. Following is a summary of the discussion paper, which can be viewed at

www.resultsbasedcode.ca

New legislation will be introduced to the legislature in the fall of 2002, and implementation of the new code will commence in April 2003.

The results-based code will include a continuous improvement process so it can easily embrace new techniques that will improve forest management activities. It also reflects government's commitment to coordinate environmental protection by recognizing and integrating significant policy initiatives underway in other ministries. For example, it addresses new policy directions in landscape level planning from the Ministry of Sustainable Resource Management and the shift to outcome-based environmental management from the Ministry of Water, Land and Air Protection.

British Columbia's Forest Practices Legislation

When British Columbia's Forest Practices Code was introduced in 1995, many people felt a high level of government oversight was needed to assert the public interest in forest management. As a result, the current code is a complex policy framework that allows little operational flexibility.

While the code did increase environmental protection and led to consistent enforcement measures, it has been argued that its prescriptive nature is stifling innovation and increasing costs for both industry and government. It often forces professionals to adhere to practices that ultimately are not the most effective or efficient.

The new Forest Practices Code will focus on results rather than process so industry and government specialists can spend more time in the field. It sets out clear results and rules, lets

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companies choose the best way to achieve these results and holds them accountable for the outcome.

Forest companies have the knowledge and the incentive to deliver results. They have continually improved their performance records since 1995, as evidenced by the general trend in Forest Practices Board audits and the growing number of companies that have been certified.

How the proposed results-based system will work

The heart of a results-based code is a legal framework that requires a clear definition of what is to be achieved—both at the landscape level and at specific site or stand levels.

The proposed results-based system is built around a resource development permit that Ministry of Forests district managers issue once they are convinced a development has passed four tests:

- Test # 1 confirms that the proposed development will not conflict with tenures or the legal rights of others in the area.
- Test #2 confirms that the proposed forest development units meet the objectives for land use zones covered by those units.
- Test # 3 confirms that the person applying for the permit has gathered and considered information from the public respecting the proposed forest harvest units.
- Test # 4 confirms that the proposed forest development units have been located in a manner that does not present risks to community watersheds and watersheds with significant downstream fisheries values.

The term of the resource development permit is up to five years.

The consequences of not achieving stated results

British Columbia currently has one of North America's most comprehensive compliance and enforcement regime regulating forest practices. The proposed code retains this wide range of enforcement options and enhances them in a number of ways. Most notably, it recommends a new statutory power so government can intervene in situations where a contravention has not yet occurred, but is likely and represents a significant risk to the public, property or the environment.

Government will keep a performance record for each licensee and for its own performance under its Timber Sale Program, reporting to the public on both good and poor performance. This information will be useful for organizations that certify forest practices of companies and for customers who want to know about the forest practices of particular companies.

In addition, the Ministry of Forests is restructuring its compliance and enforcement organization to maximize effectiveness and efficiency. The Ministry of Water, Land and Air Protection will continue to have a strong role in standard setting and enforcement to ensure environmental values are protected.

The Forest Practices Board, an independent agency with responsibilities under the existing Forest Practices Code, will continue to conduct independent audits, investigate complaints, participate in appeals, and provide special reports.

Protecting forest and environmental values

The proposed code maintains the forest and environmental values currently in the Forest Practices Code, with a goal statement for each. The results are based on these goals, which include:

Landscape level biodiversity: Harvesting activities will retain old forest and other age classes consistent with land use objectives established by government.

Wildlife trees: All harvest areas will retain ecologically suitable wildlife trees in quantity, quality and distribution typical of naturally occurring stand structure.

Coarse woody debris: All harvested sites will retain ecologically appropriate coarse woody debris in a quantity, quality (size, species, decay class) and distribution typical of natural forest conditions, considering other resource management goal statements.

Management of visual quality: Forest development activities will achieve visual quality objectives within scenic areas.

Forest health: Forest health management will protect provincial forest and range resources and will maintain productivity by minimizing losses and mitigating future risks to provincial forest and range resources from forest health factors and invasive plants.

Roads,stream crossings and access management: Licensee roads that are constructed, maintained, or deactivated on the provincial forest land base will be stable, safe for users, and will achieve results and objectives stated for forest and environmental values.

Silviculture: Silviculture activities will sustain or enhance the productive capacity and value of the land and forest for timber and non-timber resources at the stand and landscape levels.

Gene resources: Sufficient genetic diversity will be maintained to allow adaptation to environmental change and to avoid indiscriminate movement of seed and vegetative material resulting in poorly adapted regeneration.

Soil conservation: Forest harvesting, site preparation and range activities will protect soil properties, including the physical, chemical and biological attributes in addition to the natural drainage patterns of the site.

Terrain hazard management: Forest development will be conducted in a way that will not cause landslides, adverse gully processes and snow avalanches that place human life at risk, and that can damage public and private property and forest resources, including water quality in community watersheds.

Community watersheds/watersheds with significant downstream fisheries values: Forest and range activities will conserve fish, fish habitat, water quality, quantity and timing of flow in community watersheds and watersheds that have significant downstream fisheries values.

Riparian (streamside) management: Stream channel dynamics, aquatic ecosystems, fish and fish habitat and the water quality of all streams, lakes, and wetlands will not be harmfully impacted by forest and range activities.

Ungulate winter range: Forest cover and forage will be conserved over an area necessary for winter survival of ungulate species (e.g. deer, elk, moose and caribou), recognizing regional variance in the ecology of ungulate species.

Species at risk: Through the provincial identified wildlife management strategy, species at risk will be protected from further loss, extirpation or extinction that may result from forest and range practices.

Other resource features: Forest and range practices will protect other unique resource features, such as salt deposits or an eagle wintering area.

Cultural heritage resources: Cultural heritage resources will be identified and appropriate management mechanisms established so forest or range practices do not impact them.

Lakeshore management: Fisheries, riparian, aesthetic, recreation and other important social

and ecological values will be conserved adjacent to lakes greater than five hectares.

Woodlot management

The Woodlot Licence Forest Management Regulation will be replaced by the results-based code. Woodlots and Community Forest agreements will be exempted from provisions that are not relevant to tenures of up to 600 hectares. For example a resource development permit for a woodlot will not be required to address landscape level biodiversity objectives. Woodlot resource development permits will generally have a 10-year term to allow planning stability on these small tenures.

Range management

Proposed range management is similar to timber management, but using a range use plan instead of a resource development permit. Government will continue to share some accountability for results given the many small-scale range users of Crown forage resources.

Range use plans would be the only document needed for approval of livestock grazing and range development. They would be subject to the four approval tests required for resource development permits, as well as requiring additional information related to range uses such as grazing and hay cutting activities

Fire management

The new code states that values and resources on the land base will be protected from the risk of damage or destruction by fire caused by forest or range practices. Since fire protection provisions in the Forest Practices Code are more wide-ranging than other subject matter addressed, the Ministry of Forests is addressing fire management through both the new code and through a proposed new Wildland Fire Act, which is still under development.

Requirements for any British Columbian to report a fire, to take steps to suppress any unwanted fires, and to make every effort to extinguish any fires they start will be set out in the Wildland Fire Act.

The Ministry of Forests will develop a separate discussion paper on wildfire in summer 2002 to address legislative intent, policy issues and development of a more efficient service delivery model. Full implementation of the Wildland Fire Act is expected in 2004, although some provisions related to cost recovery may be applicable as soon as spring 2003. Further information about the process leading to development of the Wildland Fire Act will be available through the Ministry of Forests Web site at **www.gov.bc.ca/for/**

Consultation process

The government is inviting public and stakeholder comments on the proposed results-based code from now until June 30, 2002. Dr. George Hoberg, head of the Department of Forest Resources Management, University of British Columbia, will meet with the stakeholders and will also compile comments in response to the discussion paper so he can prepare a report for government this summer. The discussion paper is posted at

www.resultsbasedcode.ca

and comments can be sent electronically from this site, or mailed to:

Dr. George Hoberg
Director, Results-Based Code Consultation
Department of Forest Resources Management
University of British Columbia
2045-2424 Main Mall
Vancouver, BC V6T 1Z4
(604) 822-4717

An MLA committee, chaired by Rod Visser (North Island), will also hold a series of public meetings to invite public comments.

The www.results.based.code Web site will provide more information about the consultation process, including the MLA committee schedule and a forum for discussion.

Results-Based Forest and Range Practices Regime: Companion Document 1

Comparison of Value Management Regimes

This document compares the results-based value management regimes with the Forest Practices Code. It includes a comparison of regimes for the specific values managed by forest practices and a comparison of section 41(1)(b) of the Forest Practices Code Act of British Columbia with the proposed results-based code.

1.0 Comparative Management of Resource Values

The results-based regime for several forest resource values requires establishment of spatially explicit landscape level zones and quantitative, measurable objectives for each zone. In the absence of these zones and objectives, there is need of interim zones and objectives to support the results-based regime during transition. Even where Land and Resource Management Planning zones and objectives currently exist, work must be done to translate vague resource management zone objective statements into explicit descriptions of what is to be achieved, and where at the landscape scale. Risk to forest resources will be increased if explicit landscape level zones and objectives are not available to support the proposed results-based regime.

1. Landscape Level Biodiversity

a) Old-growth representation.

Forest Practices Code: Objectives for old-growth representation were to be set in landscape unit plans or other higher-level plans. Forest Development Plans were required to be consistent with higher-level plans.

Results-based code: Objectives for old-growth representation will be established by the Ministry of Sustainable Resource Management. In the absence of established objectives, there will be interim objectives set in law. A licensee must demonstrate to the satisfaction of the District Manager that a Resource Development Permit will achieve old-growth targets.

Comparative risk assessment: Lower risk to biodiversity given that the RBC requires that clearly stated objectives must be achieved.

b) Seral stage representation.

FPC: Objectives for seral stage representation were to be established in higher-level plans. Policy to balance biodiversity conservation with timber supply limited of mature seral targets to NDT 3 and 4, and where a sensitivity analysis under the Timber Supply Review demonstrated that the Mature component of Mature plus Old seral targets would not be constraining to Timber Supply. Where objectives were set, the FDP was required to be consistent with these objectives.

RBC: Objectives for mature seral representation will be established by MSRM. Where objectives are set, a licensee must demonstrate to the satisfaction of the District Manager that a RDP will be achieve objectives for mature seral representation.

Risk: Neutral to higher in some regions, as a key component of the coarse filter for biodiversity conservation will only be partially applied across the province. The representation of forest age classes to bind the coarse filter ecosystem stewardship matrix will not exist unless objectives are set by land use planning.

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c) Landscape connectivity.

FPC: Objectives for landscape connectivity were to be set in higher-level plans. Policy does not permit a timber supply impact.

RBC: Where objectives for landscape connectivity have been set by MSRM, a licensee must demonstrate to the satisfaction of the District Manager that an RDP will achieve connectivity objectives.

Risk: Neutral.

d) Temporal and spatial distribution of cut-blocks

FPC: Objectives for the temporal and spatial distribution of cut-blocks were to be set in higher-level plans. An FDP was required to be consistent with these objectives. In addition, there were practice regulations (green-up and adjacency) and limitations on cut-block size that further constrained the temporal and spatial distribution of cut-blocks.

RBC: A licensee must demonstrate to the District Manager that an RDP demonstrates progress toward achievement of patch-size objectives where such objectives are established by MSRM. In the absence of these objectives, limits on cut-block size, green-up and adjacency will be applied.

Where there is initiative to craft a landscape design that addresses desired patch-size outcomes for a specific landscape, that design may be employed to guide location of forest development units in an RDP after MSRM sets objectives extracted from such a plan.

Risk: Neutral to conservation of biodiversity, timber supply and operational costs as the default approach under the RBC will employ the same provisions for block size as the current Code. However, there needs to be substantive work on means to achieve a temporal and spatial distribution of patches that is more closely aligned with the science and would deliver timber supply and cost reductions. Policy work is striving to integrate patch size objectives with provisions for cut-block size, adjacency and green-up to yield benefit for biodiversity conservation and timber supply. This policy is not sufficiently mature to support legislation at this time, but as progress is made, it will be incorporated into legislation through the continuous improvement process.

2. Wildlife Trees

FPC: Wildlife tree retention objectives were described in a guidebook. An FDP was required to specify the general objectives for wildlife tree retention. A silviculture prescription (SP) was required to map reserved wildlife trees and describe the function of any trees to be left standing, and this had to be consistent with the FDP.

RBC: The wildlife tree retention result will be specified in law. A licensee's operations will be required to deliver the result.

Risk: Neutral to lower as retention requirements are set in law.

3. Coarse Woody Debris

FPC: A guidebook provided information on retention of coarse woody debris. An FDP was required to specify the objectives for CWD retention. An SP was required to describe the volume and range of piece sizes to be retained on a site to meet objectives in the FDP. Management of CWD was governed by policy on timber utilization.

RBC: CWD retention results will be described as a management intent. Best management practices will describe the quantity, quality and distribution of CWD that should be retained post harvest.

Risk: Neutral.

4. Management of Visual Quality

FPC: Scenic areas and visual quality objectives (VQO) were to be set by higher-level plans. An FDP was required to map scenic areas and describe strategies to address objectives. Visual impact assessments had to be completed to inform silviculture prescriptions.

RBC: Scenic areas will be mapped by MSRM. Land use objectives for these areas will be set by MSRM as part of the strategic planning process.

The District Manager will establish VQOs consistent with those land use objectives. A licensee must deliver results that are consistent with the VQO for a scenic area.

Risk: Neutral to lower as accountability for establishment of objectives and delivery of results is clear under the RBC.

5. Forest Health

FPC: An assessment of forest health risks was required for the area of an FDP. The FDP was required to propose strategies to address risks disclosed by the assessment. The SP was required to identify forest health hazards and propose strategies to address risks.

RBC: The results for forest health management are stated in law. A licensee is required to conduct activities in a manner that will deliver the results. A forest official will have statutory power to order activities to address forest health risks. An official may declare a forest health emergency and order certain things to be done. RDP provisions are crafted in a manner that provides the flexibility needed to respond to endemic and epidemic forest health occurrences.

Risk: Lower, as the accountability for management of forest health risks is clear, and in the absence of appropriate action, statutory powers can be exercised.

6. Roads, Stream Crossings and Access Management

FPC: The Forest Road Regulation prescribed a number of assessments, standards and practices that were required to be employed in the construction, maintenance and deactivation of forest roads. Stream crossings were required to be constructed considering terms and timing windows from a Designated Environment Official.

Indirect provisions for access management were incorporated into FDP approval considerations and practices regulations. The original FPC had provisions for an access management plan that would have shown strategies for management of the forest road network. This plan was dropped in legislative revision, but no direct provisions were designed as a replacement.

RBC: The results that must be achieved by road construction, maintenance and deactivation are described in law. A number of rules are set in law to address specified risks, and to direct activities toward required outcomes. A licensee must deliver the results and employ the rules in the relevant circumstances.

Objectives will be set by MSRM for specified locations where forest road access represents a hazard to achievement of objectives for other values. A licensee will have to demonstrate to the satisfaction of the District Manager that an RDP will achieve objectives for forest road access management.

Risk: Neutral, as accountability for delivery of results is clarified. Lower for access management risk to other values as provisions that focus attention on forest roads will be clear where these roads are a hazard to achievement of objectives for other values.

7. Silviculture

FPC: A regulation described the practices and standards to be employed by a licensee in meeting obligations to establish a well stocked, healthy and commercially valuable stand of trees, and maintain it to free growing. An SP described strategies to deliver reforestation obligations and was approved by government. Stand tending and incremental silviculture activities were governed by practices regulation.

RBC: The management approach requires a licensee to achieve results that are prescribed in law. The definition of the standards to be achieved are stated in law.

Risk: Neutral, accountability for achievement of results according to defined standards is clear. Government will have statutory power to intervene proactively in certain situations to reduce risk.

8. Gene Resources

FPC: Two regulations described the practices and standards required for 1) the collection,

registration, processing and disposition of tree cones, seed and vegetative material; and 2) the establishment of a free-growing stand on an area under An SP (for those persons who carry out planting). A licensee was required to use best genetic quality source available and not exceed transfer limits set for seed and vegetative material as described in a cited guidebook, unless otherwise authorized by the District Manager.

RBC: The gene resource management approach requires a licensee to achieve results that are prescribed in law. A licensee is required to conduct activities in a manner that will deliver the results and employ rules where relevant. Gene resource management will be tied to established landscape level objectives. In the absence of established objectives, limits set through conditions of registration will be applied. Statutory powers may be exercised where licensee activities may pose a significant risk to achievement of results or damage to gene or other resources may ensue.

Risk: Neutral as accountability for delivery of results is clear under the results-based code. Lower for gene resource management as provisions for stewardship and landscape level objectives will be clear.

9. Soil Conservation

FPC: Soil conservation standards were described in the Forest Practices Code Act and practice regulations. An SP was required to address soil conservation issues for each harvested site.

RBC: Results and rules for soil conservation will be set in law. Forest practices must meet results and employ rules where relevant.

Risk: Neutral.

10. Terrain Hazard Management

FPC: Assessment and management requirements to identify and address terrain hazards were prescribed in regulation. Terrain stability assessments were required prior to approval of operational plans. Practices were prescribed relative to certain classes of terrain hazard.

RBC: Results and rules for management of terrain hazards will be set in law. Forest practices must meet results and employ rules where relevant. Statutory powers may be exercised to order specific actions to address terrain hazards that may pose a risk to the public, property or resources.

Risk: Neutral, as professionals will need to be particularly attentive to terrain hazards to deliver required results. If there is significant risk that a licensee's activity will not properly address a hazard, government will be able to intervene.

11. Community and Fisheries Sensitive Watersheds.

FPC: Forest development in community and fisheries sensitive watersheds was subject to provisions for watershed assessments. The procedures governing such assessments were described in a cited guidebook. Specific terrain and soil erosion assessments were also required. An FDP was required to be consistent with the results of the assessments, or to incorporate a statement as to why it was inconsistent. Practices regulations governed how activities were to be conducted to achieve water quality objectives.

RBC: A result statement specifies what outcomes must be delivered for community and fisheries sensitive watersheds. The licensee must identify hazards to achievement of results and apply measures to address them. With respect to community watersheds and watersheds that have significant downstream fisheries values, RDP Test #4 allows the District Manager to determine if a licensee has properly identified terrain and cumulative hydrological hazards that would require management attention, and may determine if proposed development has been properly located relative to the hazards. The legal rights of licensed domestic water users are protected under RDP Test #1. Statutory powers for government to intervene where terrain hazards are not being properly addressed will also protect community watersheds.

Risk: Neutral to higher given shift away from pre-planning to reliance on licensees to address hazards. FPC approach required a reliance on

planning to deliver outcomes; RBC regime requires a licensee to be particularly attentive to hazards within a watershed.

12. Riparian Management.

FPC: Streams, wetlands and lakes were required to be classified according to a regime described in guidebooks. FDPs were required show to riparian class of these features and the general objectives for riparian management. SPs described the riparian classes and retention parameters for riparian zones. Widths of riparian zones were set in regulation. Retention parameters were described in a guidebook. Practices regulations governed stream bank protection measures and temperature sensitive streams.

RBC: Widths of riparian zones and objectives for retention will be set in regulation by class of feature. These provisions will apply whether or not features are classified. These rules will include parameters for temperature-sensitive streams and stream bank protection. Fisheries Sensitive Zones will be defined in law as a resource feature.

Basal area retention within management zones will be selected by a licensee considering legal riparian results and non-legal best management practices. Risk to values associated with riparian areas must be managed by the licensee, with inspections by government, as there will be no government approval of operational plans that specify a licensee's riparian management commitments.

There will be provision for a licensee to develop alternative strategies. Where such a plan exists, a statutory authority could exempt the licensee from RBC riparian provisions. A statutory power will allow government to intervene if results are not achieved by the alternative strategy.

Risk: Neutral, possibly higher as government will not be approving retention measures and will rely on inspections to identify failure to achieve required results.

13. Ungulate Winter Range

FPC: A FDP was required to show ungulate winter ranges. An SP was required to describe the site conditions that were to be achieved for UWR. Practices regulations described certain limitations on forestry activities on UWR and defined a process for the establishment of UWR and their objectives.

RBC: UWR will be spatially defined and objectives set by WLAP. A licensee will have to demonstrate to the satisfaction of the District Manager that the location and intensity of forest development units in an RDP will achieve objectives for UWR. If a stand level result is required by the objectives or general wildlife measures, a licensee's operations will be required to deliver that result.

Risk: Lower as accountability for UWR spatially explicit objectives has been clarified. Clear objectives will permit improved stewardship of UWR.

14. Identified Wildlife

FPC: Practice regulation and policy lay out the means by which measures for management of Identified Wildlife are established. An FDP was required to show the location of any wildlife habitat area. The SP was required to show a WHA and describe site conditions that must exist to accommodate the WHA.

RBC: WHAs, objectives for these locations, and areas where general wildlife measures apply will be set by WLAP. A licensee must demonstrate to the satisfaction of the District Manager that forest development units in an RDP are properly located relative to objectives for identified wildlife, or general wildlife measures for an ecosystem unit. If a stand-level result is required by the objectives or measures, a licensee's operations are required to deliver that result.

Risk: Neutral as long as the locations and objectives for identified wildlife, and/or general wildlife measures for an ecosystem unit are delivered to support preparation of the RDP. Accountability for establishment of identified wildlife objectives now is clear.

15. Resource Features

FPC: Regulations prescribed practices to protect known resource features.

RBC: A licensee will be required to conduct operations in a manner that would not damage resource features. A clear definition of what comprises a resource feature will be provided in law. The ability to recognize these features can be difficult, often being located after timber development starts. The onus will be on the licensee to properly identify these features and apply measures to protect them.

Risk: Neutral, as protection of these features will require a licensee's vigilance and specific attention to measures for the presence of resource features.

16. Cultural Heritage Resources

FPC: Assessment were required to be completed to inform preparation of the FDP and strategies in SPs to address identified features.

RBC: Cultural heritage resources will be identified and management measures will be established to ensure that forest and range activities do not impact these resources.

Risk: Neutral to higher as assessment is no longer required. Licensees will need to recognize potential for cultural heritage resources, and manage accordingly.

17. Lakeshore Management

FPC: A process for classification of lakeshores was described in guidebooks, however, guidebooks were only completed for part of the province. An FDP was required to show the lake class. The SP was required to show the lake class, the extent of the lakeshore management zone, and retention parameters for the zone.

RBC: Objectives for a lakeshore management zone will be set by a statutory decision maker. Before an RDP is issued, a licensee will demonstrate that forest development units in a lakeshore management zone are properly located relative to objectives. If the objectives specify a stand-level result a licensee is required to deliver that result.

Risk: Neutral to lower given that lake classes and objectives would be established to support preparation of an RDP.

18. Management of Access to Crown Land for Recreational Use

FPC: Cited provisions for management of recreational sites and trails, and provided authority for the District Manager to effect control of access to Crown land for recreational use. These provisions were not directly applicable to many issues where recreation users competed for the same land base, or where recreational activities posed a hazard to forest or environmental values.

RBC: No provisions for management of recreational access to Crown land. MSRM has the mandate to set objectives for areas of competing recreational interests, or where access poses hazards for values. These objectives will be applied operationally under separate legislative provisions such as the Wildlife Act and Land Act.

Risk: Will depend on level of initiative to set effective objectives. If this cannot be done for key issues, such as zoning recreational activity relative to caribou habitat or other interests such as backcountry skiing, there will be risk of negative impact to other resources or recreational opportunity for some sectors.

2.0 Comparison of Section 41(1)(b) of the Forest Practices Code of British Columbia Act with Provisions of the Results-Based Code?

Section 41(1)(b) was intended to be a safety-net provision that required a forestry planner to be aware of forest resources in the area of a forest development plan or silviculture prescription , and design strategies to adequately manage and conserve these resources. The District Manager had to be satisfied that the FDP or SP would adequately manage and conserve forest resources in the area of the plan before approving the plan or prescription.

Rigorous debate continues on what 41(1)(b) actually does, what is required in terms of plan content, and what actually constitutes "adequate management and conservation" for any forest

resource that might have been within the FDP area. In many cases it remains quite unclear as to what values were legally required to be addressed in a plan, and whether 41(1)(b) was a conservation provision, or one requiring a balancing of competing interests. The absence of landscape unit objectives exacerbated a sense that 41(1)(b) had no specified legal boundaries, and hence standardized principles to guide determinations of adequate management and conservation were difficult to develop.

Problems with operational application of 41(1)(b) prompted specific attention to design of alternative provisions in the results-based regime. In a legal regime where the land use zones and objectives (or interim objectives) direct planning and decisions to authorize forestry activities, and where specified results are legally required to be achieved, a subjective test such as that embodied by 41(1)(b) would not be needed.

The proposed results-based forest and range practices regime encompasses the structure of the province's coarse filter ecosystem management regime including but not limited to, riparian, access management and biodiversity conservation provisions. In crafting the proposed results-based regime each aspect of the coarse filter was identified along with a description of what was required to make the filter work. An RDP test against landscape objectives, a result or a rule has been crafted to sustain the structure of the coarse filter.

For those resource values that fall through the coarse filter, there are fine filter provisions such as UWR or Identified Wildlife provisions. These fine filter provisions are typically driven by landscape-scale zones and objectives designed to address the needs of specific resources where they are located.

The original intent of 41(1)(b) is sustained in the results-based regime through land use objectives and related RDP testing, by statements of what results must be achieved, or by rules applied to achieve required outcomes, through consultation and by provision for government intervention. The following summary describes how the results-based regime provides a rigorous alternative to the original intent of 41(1)(b):

a) Landscape level zones and objectives:
   - Zones and objectives provide spatially explicit and measurable targets for a number of forest resource values where management is effected at the landscape scale. Authority to develop forest lands will not be issued until it is demonstrated to the satisfaction of the District Manager that these objectives will be achieved. In the absence of legally established objectives, there will be interim objectives to direct forest development planning.

b) Results that are legally required to be delivered:
   - Results statements for a number of forest resources exist throughout the proposed RBC regime. These results are explicit in their description of the required outcome of a licensee's activities. They require a licensee to identify risks relative to achievement of the required result, and to design strategies to manage those risks to meet the legal requirement.

c) Rules that must be followed while conducting operation activities:
   - There are rules that state what must be done to deliver a required outcome for several forest resources. These rules exist to ensure delivery of the outcome where it is difficult to ascertain successful achievement of a result, or where risk from a specific activity is known to pose a hazard to achievement of a result.

d) Consultation with First Nations and the public:
   - Consultation processes that must occur under the proposed results-based regime will allow identification of risks to forest resource values that will need attention during preparation of an RDP. This information may provide insight on values that may otherwise remain unknown to a forestry planner or the District Manager.

e) RDP test for specific hazards:
   - The RBC recognizes the potential that significant risks to community watersheds, and watersheds with significant

downstream fisheries, may exist and could pose a high risk to delivery of required results. This provision strengthens the ability to manage and conserve watershed values relative to terrain hazards and cumulative hydrological impacts.

f) Statutory powers of intervention:

- The proposed results-based regime incorporates statutory powers of intervention for some forest resource values where it is possible that a licensee's activities may pose a significant risk to achievement of results, or could damage other resource values.

g) Best management practices and information from the non legal realm of the results-based regime:

- Information from the non legal realm will support the standard of diligence in the preparation and issuance of resource development permits, and in selection of practices to deliver required results. This information will include area-specific risk management considerations for resource values where hazards exist given the current state of the land and forest relative to objectives or results.

Results-Based Forest and Range Practices Regime: Companion Document 2

Management of Clearcut Block Size and Distribution

This document outlines the process planned to design an appropriate management regime for temporal and spatial distribution of cut-blocks under the results-based code.

One of the goal statements for forest values in the proposed results-based code states that "forest harvesting will emulate the temporal and spatial distribution of openings created by natural disturbance, and will prevent forest fragmentation consistent with objectives that balance biodiversity conservation with social and economic considerations".

The current Code places limits on clearcut blocks of 40 hectares or 60 hectares, depending on the geographic location, unless there is a reason, as specified in regulation, to increase the size of a clearcut (e.g. when salvaging damaged timber or where the cut-block is consistent with natural disturbance characteristics). These limits are inconsistent with the science of biodiversity conservation and, when combined with green-up and adjacency practices, they inappropriately constrain timber supply and forest development scheduling, while increasing operational costs and reducing government revenue.

In addition, the District Manager will issue a Resource Development Permit only if a proposed development passes Test #2 (page 14, discussion paper). This test requires that the proposed locations of development units meet legal objectives for the size, timing and location of cut-blocks in land use zones covered by the RDP.

The results-based code aims to design a management regime for the temporal and spatial distribution of cut-blocks that addresses biodiversity conservation, cut-block size, green-up and adjacency provisions of the Forest Practices Code in an integrated fashion.

A great deal of technical work is needed to manage the size, timing and location of clearcuts to achieve landscape designs that are suitable for biodiversity conservation while yielding benefits to timber supply and reducing costs. There is not enough time to complete this detailed scientific review between now and fall 2002 when legislation is to be introduced and spring 2003 when the results-based code is to be implemented.

For this reason, a transitional strategy has been adopted based on current provisions governing clearcut block size, green-up and adjacency. During this transition, there will be provisions to adopt alternative strategies for the temporal and spatial distribution of cut-blocks in cases where licensees craft a clearly rationalized approach to landscape design that integrates patch size and age class representation objectives considering current science and the ecological context of the area. This will encourage innovation and progress in biodiversity conservation while achieving timber supply, timber access and cost reduction goals.

At the same time, the Ministry of Sustainable Resource Management will work with staff in the Ministry of Forests and Ministry of Water, Land and Air Protection to prepare patch size objectives for selected areas of the province under land use planning initiatives.

Once both the technical work and resulting policy work are complete, a revised approach to management of the temporal and spatial distribution of cut blocks-would be introduced into the results-based regime through the legislation's continuous improvement process.

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Results-Based Forest and Range Practices Regime: Companion Document 3

Response to Forest Health Problems

This document outlines how the results-based code will respond to the four general types of occurrences that require forest health factor (FHF) management:

- *epidemic/catastrophic (massive damage across landscapes—beetles, fire, wind);*
- *endemic (small patches in a landscape or stand—beetles, budworm, wind throw sites etc.);*
- *endemic (within a regenerating stand—root rots, leader weevils etc.); and,*
- *invasive plants.*

Epidemics and catastrophes

The results-based regime readily accommodates epidemics by way of zoning the Resource Development Permit for management actions to address massive FHF occurrences or subsequent salvage operations.

In the event that a catastrophe occurred, an official will be empowered to order licensees to implement measures to address the infestation or resulting damage. This will very likely mean altering harvesting plans from those outlined in an issued RDP.

There are implications for the results-based code in cases where statutory power is exercised or where a licensee wishes to exercise initiative. If an RDP has been issued, a new one will be needed to incorporate the forest health activities—in effect modifying the existing permit so FHF management is achieved along with the existing objectives.

If an RDP is being prepared to address a catastrophic event, it will follow the proposed results-based code model by identifying FHF management zones as forest development units. These zones would be similar to the zones being used for the current beetle infestation in which certain strategies are proposed to combat both massive, active occurrence of forest health factors and to salvage the timber damaged by such occurrences.

The evidence required before an RDP is issued will outline the forest health management zones proposed, the measures to be applied in each and the rationale with respect to those aspects of the RDP tests that remain relevant. The RDP will allow optimal flexibility to address forest health epidemics by providing freedom to employ measures described and in the zones described, wherever FHF are active or where massive timber sanitation or salvage must be conducted.

Endemic occurrence across a landscape or in a stand

Endemic occurrences must be managed to protect forest resources and prevent epidemics. The results-based code will require that a licensee sustain a level of sanitation and salvage harvesting to address identified FHF and stands of damaged timber at the endemic level. At a minimum, licensees will need to have information on the factors at work in the area of their RDP, and prepare strategies to address endemic occurrences in order to demonstrate due diligence.

The results-based regime must be flexible enough to encourage licensees to actively manage FHF at the endemic level in a manner that will prevent such occurrences from becoming epidemics. The RDP process must be sufficiently responsive to permit management of endemic bark beetle occurrences, wind throw and fire salvage on a voluntary basis without costly RDP revisions.

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A licensee will have authority to address any occurrence within a forest development unit in an issued RDP. However, endemic occurrences will frequently crop up outside of forest development units, and will require expedient attention. It would be inappropriate to expect revision of an issued RDP prior to providing authority to address these occurrences. There must be administrative freedom for a licensee to voluntarily address endemic occurrences outside of forest development units.

A licensee will be permitted to harvest timber for the purpose of sanitation or salvage up to a specified volume or opening size (5 ha. or 2,000 m^3) without an RDP. They will be able to provide notice of their intent to harvest infested or damaged timber by requesting a cutting permit after providing information that describes the location and nature of the occurrence.

Licensees who are aware of some endemic FHFs above the limit of 5 ha/2000m^3 may voluntarily approach the District Manager to use the order mechanism to provide authority to develop the area instead of having to submit a new RDP. In issuing the order, the District Manager will consider relevant matters related to the RDP tests, and may limit the extent of the order or attach conditions to ensure other values and interests are properly addressed.

The District Manager will have statutory authority to order that actions be taken to address endemic FHF not being voluntarily managed by a licensee. Licensees who receive such an order are legally obligated to conduct the activities identified, subject to conditions of the order.

Endemic occurrences in a regenerating stand

Endemic FHF in a regenerating stand will be addressed within the results-based code regime by requiring a licensee to exercise plantation husbandry practices that will establish and sustain a healthy stand. The results that will have to be achieved are described in the results-based silviculture management regime.

Invasive Plants

The results-based code regime will require that forest and range licensees employ all reasonable measures to ensure that occurrences of invasive weeds are contained.

Results-Based Forest and Range Practices Regime: Companion Document 4

Development of Continuous Improvement Process

This document outlines how the results-based code effectiveness assessment and improvement process will be designed. The design and implementation of these processes are integral to the long-term improvement of the results-based code, and will be part of the legislation introduced in fall 2002.

Results-Based Code Legislation Effectiveness Assessment and Continuous Improvement

The effectiveness assessment process will enable periodic assessment of the effectiveness of the new forest practices legislation and will trigger improvement to the legislation where goals and objectives for values are not being met. This process will use a "manage-by-data" approach to the evaluation of the effectiveness of forest practices legislation and regulation.

Inherent in the design of this effectiveness and improvement process will be a business process for the gathering of effectiveness data.

Designing the Business and Management Process for Effectiveness Assessment:

Under the direction of government agencies responsible for the implementation of the results-based code, a business and management design process will be implemented to craft the effectiveness and improvement processes. Design and management of this model will be lead by government research specialists and will involve both stakeholder and government specialists (see attached business process model).

With the results-based code, the key client-supplier relationships reside between government and industry stakeholders. While the specific design team makeup may vary from value to value, having both groups party to the design process is critical to the success of the process. In the design process, these design teams will make decisions on the frequency of assessment and will jointly craft the method and process to gather effectiveness data for any value under the results-based code. Risk and priority for effectiveness assessment will be assigned by a joint agency steering team. Specialist teams from both industry and government will gather field data for effectiveness evaluation.

Continuous Improvement (Management Process):

Effectiveness data will be compiled by the assessment teams and assessed against the target for any particular forest value. Performance of the legislation that varies from the target for any forest value will be reported to the joint agency steering team, complete with improvement recommendations from the assessment teams. Improvement recommendations may include changes to legislation to better protect a particular forest value, or changes to legislation where provisions are deemed excessively onerous to protect a forest value. Improvement recommendations may also be sought from working results-based code pilots, or from Innovative Forest Practices Agreements where legislative alternatives are operational and adaptive.

A defined management process as outlined above will ensure periodic review of the quality and quantity of the forest practices legislation we use in B.C. Continuous improvement of forest practices legislation is the goal.

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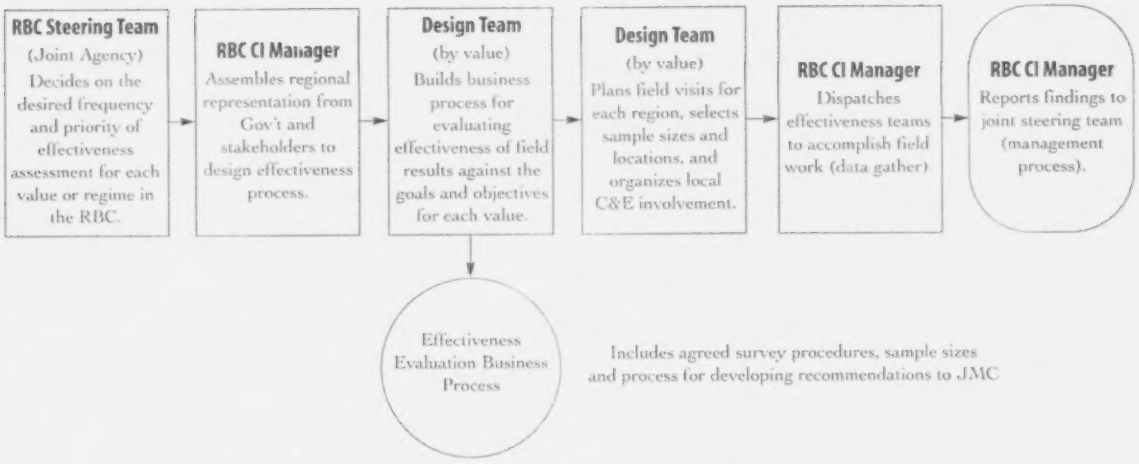
Results-Based Forest and Range Practices Regime Effectiveness Evaluations Business Process


RBC Steering Team
(Joint Agency)
Decides on the desired frequency and priority of effectiveness assessment for each value or regime in the RBC.
RBC CI Manager
Assembles regional representation from Gov't and stakeholders to design effectiveness process.
Design Team
(by value)
Builds business process for evaluating effectiveness of field results against the goals and objectives for each value.
Design Team
(by value)
Plans field visits for each region, selects sample sizes and locations, and organizes local C&E involvement.
RBC CI Manager
Dispatches effectiveness teams to accomplish field work (data gather).
RBC CI Manager
Reports findings to joint steering team (management process).
Effectiveness Evaluation Business Process
Includes agreed survey procedures, sample sizes and process for developing recommendations to JMC

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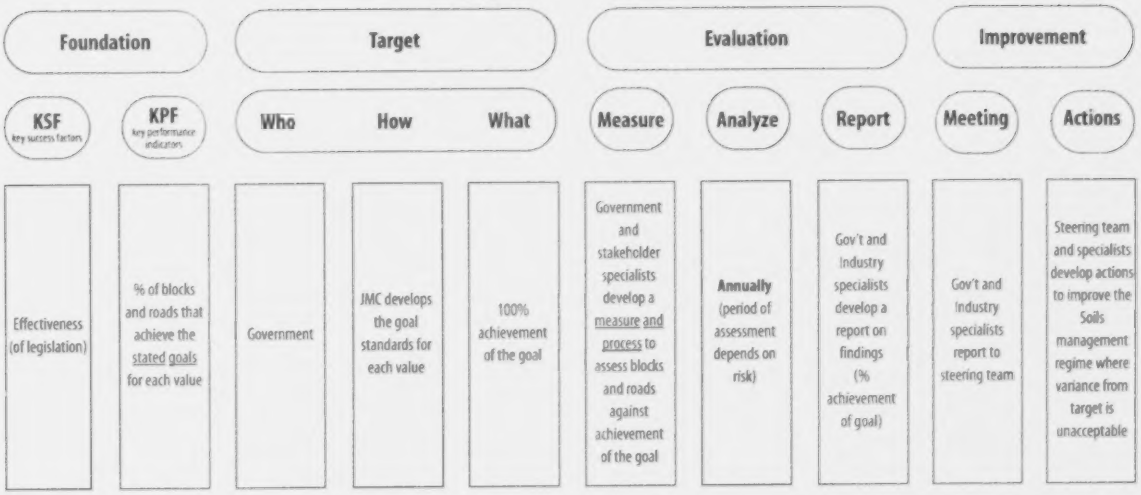
RBC Management Process for Effectiveness Evaluation of Results-Based Forest and Range Practices Regime Legislation


Foundation
Target
Evaluation
Improvement
KSF
key success factors
KPF
key performance indicators
Who
How
What
Measure
Analyze
Report
Meeting
Actions
Effectiveness (of legislation)
% of blocks and roads that achieve the stated goals for each value
Government
JMC develops the goal standards for each value
100% achievement of the goal
Government and stakeholder specialists develop a measure and process to assess blocks and roads against achievement of the goal
Annually (period of assessment depends on risk)
Gov't and Industry specialists develop a report on findings (% achievement of goal)
Gov't and Industry specialists report to steering team
Steering team and specialists develop actions to improve the Soils management regime where variance from target is unacceptable

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Results-Based Forest and Range Practices Regime: Companion Document 5

Role of Resource Management Professionals

This document explores the role of resource professionals. While the results-based code is silent on the role of professionals, licensees will often depend on them to meet code obligations. The term "resource management professionals" refers to professional foresters, engineers, geoscientists, agrologists and registered professional biologists.

Introduction

The legal framework for the results-based code regulates the relationship between government and licensees. It also ensures that clear lines of accountability exist between them and are understood, maintained and enforced. The code will not define or regulate the relationship between employers (licensees, government and others) and resource management professionals who work for them.

Although the code is silent on the role of professionals, their role is vitally important. In many cases employers will depend upon the judgment of these professionals to meet results-based code obligations.

The areas of practice of some professionals (foresters, engineers and geoscientists) are set out in separate legislation. Other professionals (biologists and agrologists) do not have right-to-practise legislation, but do have the right to title.

All professional associations, whether established with right to title or right to practise, establish codes of conduct, which bind their members. They have mechanisms to ensure members are accountable to their association and to the public. They also have enforcement powers that can be used against those who engage in unauthorized practice or improper use of title. These are essential elements in maintaining public confidence and trust in the integrity, judgment, expertise and independence of professionals.

Roles of Resource Management Professionals Related to the Results-Based Code

Professionals play many roles in the specific context of the results-based code, and in addition to their professional obligations, these roles are expected to be:

(1) In government:

Professionals will contribute their expertise and judgment in support of the government's mandate to deliver the code effectively. This will involve, for example:

- providing scientific expertise—in a fair and open process—to the District Manager making a determination on a Resource Development Permit;
- conducting effectiveness evaluations to determine if the specified results have been achieved;
- supporting the government's power to intervene when specific values are at risk; and,
- playing an expert witness role in the compliance and enforcement process.

(2) In industry:

The role of resource management professionals will include the following:

- developing strategies and prescribing steps designed to ensure that results are achieved and rules are complied with;

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- providing credible evidence to confirm that the RDP meets the tests identified in the code; and,
- ensuring plans are implemented as intended.

The Relationship between Licensees and Resource Management Professionals

Licensees will determine when they should rely on the judgment of a professional. Two key areas for consideration will be in the evidence being provided to meet the RDP tests and for due diligence for compliance and enforcement purposes.

In cases where professional associations have been granted right-to-practise legislation (i.e., foresters, engineers and geoscientists), employers are required to use members of particular professional associations to carry out prescribed activities within their scopes of practice. Although no such requirements exist for professions not governed by right-to-practise legislation, those practitioners who belong to associations with right to title such as biologists and agrologists, are accountable through their associations. Therefore, when using biologists and agrologists it would be advisable for licensees to employ members of the professional associations that have right to title so that like foresters, engineers and geoscientists, these professionals can be held accountable for their actions.

Employers must be cognizant that in the interest of demonstrating due diligence, they should ensure that resource management professionals are members of professional associations, and as such are governed by the respective associations' codes of ethics and standards of professional practice.

Results-Based Forest and Range Practices Regime: Companion Document 6

Sustainable Forest Practices – Criteria and Indicators

This document looks at how the results-based code will measure and report on criteria and indicators for sustainable forest management.

Introduction

The sustainability of forest practices is a growing international concern. Reporting out effectively on sustainable forest management (SFM) can be important to securing or maintaining market access, and also in improving communication with the many interest groups and individuals that have an interest in forest practices.

The Montreal Process includes Criteria and Indicators (C&I) for conservation and sustainable management of temperate and boreal forests. Virtually all nations with these forest types, including Canada and the United States, were involved in developing the C&I, and have approved the approach.

The Canadian Council of Forest Ministers (CCFM) has developed national C&I that are similar to, or augment, those in the Montreal Process. These are used in national reporting on SFM, and by the Canadian Standards Association in its forest certification system.

Under Canada's National Forest Strategy, several provinces have adopted provincial sets of C&I, and many are preparing to incorporate them into their forest management planning. In addition, some provinces have taken steps to integrate C&I into their forest legislation, while others are considering that possibility.

It is important the B.C.'s results-based code and related legislation (such as Forest Act and Ministry of Forests Act) and information sources be designed, co-ordinated and implemented so that the province can effectively report on SFM. This will help to:

- promote awareness and delivery of SFM;
- meet national and international commitments to report progress on SFM;
- support industry efforts to seek forest certification;
- communicate to markets and the public efforts toward SFM; and,
- support Defined Forest Area Management by providing a framework of provincial-level indicators that may be used as Local Level Indicators in support of Sustainable Forest Management Plans.

This will require a partnership effort involving:

- the Ministry of Forests given its involvement in developing and maintaining the results-based code,
- the Ministry of Sustainable Resource Management with corporate data warehouse responsibilities,
- the Ministry of Water, Land and Air Protection given its key environmental role,
- the forest industry given a Defined Forest Area Management model;
- First Nations given their knowledge regarding traditional use and cultural heritage values; and,
- other stakeholders, academia and the public where they can provide information.

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Without careful linkages and partnerships, it may be difficult to explain how or if the results-based code will contribute to SFM. It is important to note that C&Is can rely on both legal (e.g. the code) and non-legal (e.g. best management practice documents) frameworks for forest stewardship that collectively contribute toward SFM.

The Ministry of Forests Act requires that the province undertake a resource analysis every 10 years with next one due in 2004. More frequent State of the Forests reporting that is linked to internationally accepted C&I may need to be considered.

SFM Criteria and Indicators can be reported out:

- nationally (e.g. CCFM does so as part of Canada's State of the Forests reporting);
- provincially (e.g. WLAP's State of Environment report addresses in part; MOF's intended State of Forests report will address); and
- locally for Defined Forest Areas (as part of Sustainable Forest Management Plan using Local Level Indicators , which may be used also to support forest certification).

To promote further discussion, potential linkages between the results-based code and some example indicators are attached using the following seven SFM criteria in the Montreal Process:

1. conservation of biological diversity;
2. maintenance of productive capacity of forest ecosystems;
3. maintenance of forest ecosystem health and vitality;
4. conservation and maintenance of soil and water resources;
5. maintenance of forest contribution to global carbon cycles;
6. maintenance and enhancement of long-term multiple benefits to meet the needs of societies; and,
7. legal, institutional and economic framework for forest conservation and sustainable management.

Further discussion with resource agencies, forest industry, environmental community, academia, other key stakeholders, the public and First Nations are needed to develop and refine linkages between the proposed code and SFM C&I. For example, what are the specific reporting measurements that best capture the indicator? How and by whom should the data be collected? How frequently should it be reported?

Potential Linkages between Results-Based Code and C&I

using some example indicators

Criterion 1: Conservation of biological diversity

Indicator	Code linkages	Possible reporting measurement
Extent of area by forest type relative to total forest area.	Silvicultural result that harvested areas be reforested. Silvicultural result to maintain forest types at landscape level.	Area by forest type (by both subzone/variant and leading species) relative to total forest area and total area.
Fragmentation of forest types.	Harvesting test that allows cut-blocks to contribute towards a diversity of patch sizes.	Area of patch size relative to "target" range by natural disturbance type.
The status of forest species at risk of not maintaining viable breeding populations.	Result that practices will maintain ecosystem attributes necessary for the survival of Identified Wildlife.	Number of wildlife habitat areas.

Criterion 2: Maintenance of productive capacity of forest ecosystems

Area of forest land and net area of forest land available for timber production.	Riparian Reserve Zones and Wildlife Tree Patches represent "netdowns" to Timber Harvesting Land Base (THLB).	THLB area relative to total forest area by forest type (subzone/variant and leading species).

Criterion 3: Maintenance of forest ecosystem health and vitality

Area and percent of forest affected by processes or agents.	Harvest practices must contain or reduce spread of epidemic forest health factors (FHFs).	Area of forest disturbed by insects (e.g. bark beetles).

Criterion 4: Conservation and maintenance of soil and water resources

Area and percent of forest land with significant soil erosion.	Rule that soil disturbance cannot exceed certain limits. Result that practices not cause landslides where events cause significant damage.	Area and percent of forest land that has been impacted by landslides, gullies or major erosion.

Criterion 5: Maintenance of forest contribution to global carbon cycles

Total forest ecosystem biomass and carbon pool, and if appropriate, by forest type, age class and successional stages.	Requirements to reforest and sustain or enhance forest productivity (i.e. capability of forests to store carbon not diminished).	Total biomass by forest type and age class.

Criterion 6: Maintenance and enhancement of long-term multiple benefits to meet the needs of societies		
Indicator	**Code linkages**	**Possible reporting measurement**
Area and percent of forest land managed for general recreation and tourism, in relation to the total area of forest land.	Forest practices are to be compatible with strategic land use zones and objectives. Scenic areas are to be managed consistent with visual quality objectives or interim objectives.	Area in scenic areas by visual quality objective class. Area of land in various Recreation Opportunity Spectrum classes.
Criterion 7: Legal, institutional and economic framework for forest conservation and sustainable management		
Encourages best practices codes for forest management.	Results-based code provides legal code framework. Best management practices (BMPs) provide non-legal advice.	Number and type of evaluations to determine effectiveness of code. Number and type of approved BMPs.

Results-Based Forest and Range Practices Regime: Companion Document 7

Resource Development Permit Map

This document illustrates the kind of details that will need to be included in the geo-referenced map that is presented to the District Manager for the Resource Development Permit.

The RDP map will identify the outer boundaries of proposed forest development units (areas of timber harvesting and access road corridors). These outer boundaries must encompass the full extent of the proposed development activities.

To avoid unnecessary amendments, specific locations of any particular timber harvesting and/or road construction activity do not have to be identified until the option to develop conferred under the RDP is exercised through a cutting permit or road permit—or, in the case of the Timber Sale Program, through the award of a Timber Sale Licence. The focus, therefore, is to show the outer boundary of the proposed development so there is latitude to place the development in the most appropriate location based on subsequent site evaluations.

In some cases, the licensee may include a limited number of details regarding proposed development in a table appended to the RDP map. This may be key evidence to support why the RDP proposal is believed to satisfy some approval tests. For example, it may be used to provide evidence that the RDP proposal meets the objectives for land use zones that apply to the forest development unit, or that the proposed forest development has been appropriately located with respect to terrain hazards in a community watershed.

The RDP map must include topographic reference points, and be of a scale and format satisfactory to the District Manager. An RDP proponent's innovation for additional mapping content has not been restricted. It is important that the map and legend be clear and easily understood by those who may wish to review the plan and the District Manager who approves the RDP.

Although not required by legislation, possible additional legend elements that can enhance the clarity of the RDP map include forests cover, existing harvested areas and roads, road deactivation, streams, wetlands, lakes, management areas, private property, utilities, and any other pertinent elements.

The Ministry of Forests, in partnership with licensees, other agencies and the interested public, may decide to develop an RDP template to encourage an effective and efficient approach to the RDP map, legend and supporting table(s) of evidence.

To facilitate improved opportunities for public review, consideration will be given to posting the RDP proposal, including the map, on licensee Web sites, with a link to the MOF Web site. This would, for example, allow rural users (e.g. lodge owners, trappers, guide outfitters, and others) who may not have easy access to newspaper advertisements to more readily access the RDP proposal and provide comment. MOF will discuss this idea further with licensees and other interested parties.

The following page shows an example of an RDP map with proposed forest development unit boundaries shown including road access corridors. The example also shows typical additional information that a licensee may show to provide context or evidence.

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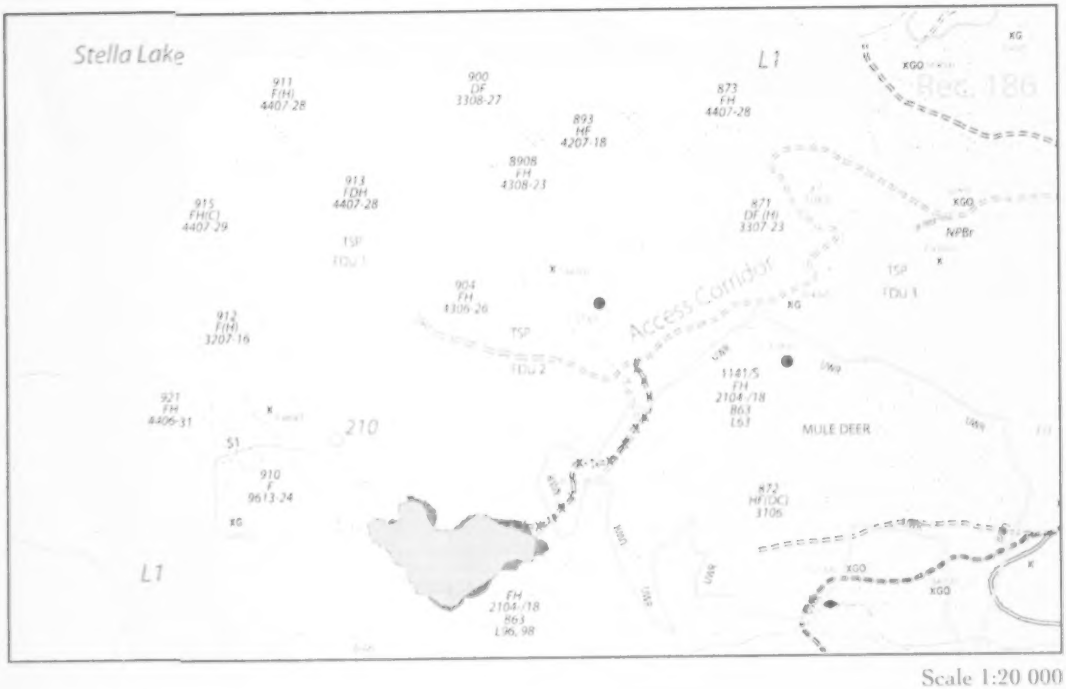
RDP Map Example



Scale 1:20 000

Map legend

RDP proposal (required map content):

FDU (pink):	forest development unit outer boundary (note: cutblock(s) must be within area
====(pink):	proposed road access corridor (note: corridor could vary in width)

Example of additional information (not required, but can provide context or evidence):

912 F(H) 3207-16, etc:	forest cover label describing stand age, leading species, etc.
TSP:	Timber Sales Program
UWR:	ungulate winter range boundary
Rec. 186 =	recreation map notation
L1:	lake classification
S1:	stream classification
Brown:	previously harvested area
====(black):	existing roads
=X=X=X:	deactivated road

Results-Based Forest and Range Practices Regime: Companion Document 8

The Transition from the Forest Practices Code to a Results-Based Regime

This document highlights the priority transition issues facing government agencies, forest industry licensees and other stakeholders as British Columbia moves from the current Forest Practices Code to a results-based regime, such as issues that must be addressed in legislation or regulation. The document is also intended to solicit the identification of other transition issues and suggestions on how to address them.

Introduction

British Columbia has already begun to move from the current Forest Practices Code to a new results-based forest management regime. For example, the government's Core Services Review identified a need to restructure the Ministry of Forests' mandate, which is part of that transition. Ensuring strategic linkages to the new forest tenure and pricing systems are other transitional elements already coming into play.

However, the focus for transition is to provide order and efficiency to:

- implementing, completing or replacing existing plans or other commitments approved under the Forest Practices Code, and
- ensuring all prerequisites for implementing the results-base regime are in place prior to the new legislation coming into effect.

This document assumes the results-based regime will come into effect in April of 2003. It is, therefore, critically important to identify and specify transition requirements at this time, for inclusion in the legislation and regulations. The major transition period will likely extend for about two years.

Transition issues

Existing objectives and plans

As a general principle, where possible and practicable, existing plans should be allowed to run their course, and should not have to be amended just to meet new requirements. However, there may be situations where it is advantageous for government or tenure holders to cancel existing plans and replace them with new plans under the results-based regime.

Under the Forest Practices Code, forest development plans must be consistent with objectives from higher-level plans. Until these objectives are updated through processes led by the Ministry of Sustainable Resource Management, they will remain in place. Proposed resource development units must meet each of the legal objectives for land use zones covered by the Resource Development Permit.

Land use objectives, or interim objectives, must be in place for the results-based regime to work so there is a need to clarify when they will be completed. For example, RDPs prepared over the winter of 2002/03, for approval in April 2003, will require land use objectives or interim objectives to be in place by December 2002.

Interim objectives will be set, where required, by the ministries of Sustainable Resource Management, Forests or Water, Land and Air Protection. Most long-term land use objectives will be established by MSRM in various land use plans.

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Harvesting practices under issued cutting permits will be allowed to continue until those permits expire. Existing road permits will also remain in place to guide road practices, and due to their undefined term, may require future amendments.

Currently approved "category A" cut-blocks or approved roads that appear in a currently approved forest development plan may be dealt with in several ways during the transition period. These mechanisms may include:

- Automatically roll over approved category A roads or cut-blocks into an RDP, and allow them to proceed directly to road or cutting permit application, as there will no longer be a requirement for a silviculture prescription. These areas would be administered using the results-based regime requirements.
- Conduct some type of limited review of these areas (similar to the Cutblock and Road Review done when the Forest Practices Code was introduced) to adjudicate which blocks may be considered as approved development units. This review would probably use some or all of the four RDP approval tests. These areas would be administered under the results-based regime.

For those forest development plans submitted, but not yet approved when the results-based regime comes into effect (on or about April 2003), it will be up to the licensee to determine whether to take the plan back and resubmit it as an RDP. The alternative is to proceed with a forest development plan, which may then be approved for up to two years under the current Forest Practices Code provisions. Many licensees are expected to choose the first approach.

No new forest development plans will be approved after April 1, 2003. Forest development plans approved before April 1, 2003 may be extended under the current Forest Practices Code provisions. Any such extension requests must also be approved before April 1, 2003. However, amendment provisions will be retained during the transition period for any forest development plans in place after April 2003.

Existing approved range use plans will also continue to remain in force until they expire, are withdrawn by the proponent, or are replaced with a new range use plan. In some cases, these plans are approved for up to 10 years, which may create some problems for long-term administration and enforceability.

Currently approved silviculture prescriptions present one of the most complex issues for transition. Approved silviculture prescriptions represent a substantial amount of investment in detailed field work, planning, public review and approval. An approved silviculture prescription does not have a stated expiry date.

Right now, silviculture prescriptions document the licensee's commitments for stocking standards, soil disturbance limits and measures to accommodate non-timber resource values. These types of standards will become a major part of the legislated results-based regime, however, many licensees may wish to deliver on the commitments made in their prescriptions. After April 2003, government will no longer process silviculture prescriptions amendments. Amendments will be the sole responsibility of the licensee and the professional forester that prepared the prescription.

In addition, silviculture prescriptions also provide the detail for identifying higher-risk sites that are priority for field inspection, and are the mechanisms for collecting security deposits from non-replaceable major licences to ensure their silviculture liabilities are met. There will be a need to create new mechanisms when silviculture prescriptions are eliminated.

Workload

Transition planning will include identification of the mechanisms or teams that will guide, steer, or lead the implementation of the results-based code. These teams will work within government agencies, and could also play a role with industry and other stakeholders. A number of headquarters and regional teams are likely to be formed to deliver various transition services such as training, policy advice or legal interpretations.

A variety of communication tools will be required to explain the new regime, and training materials will be developed for those involved in delivering the new regime.

Another major implementation element will be formulation of statements of best management practices, which will be prepared by the expert community in that field, and will replace Forest Practices Code guidebooks.

Another important element of transition will be determination of who will manage resource data. MSRM is expected to play a lead role, but the roles of licensees, agencies, and perhaps other stakeholders in managing and sharing data need to be defined.

Linkages

It will be critical to co-ordinate delivery and implementation of a results-based forest management regime with other initiatives, for example revisions to the tenure system through amendments to the Forest Act. There will be a need to amend and/or replace all existing tenure documents.

Finally, the cumulative effects of multiple licensees working in a single landscape must be addressed. Licensees and government agencies will need to address incompatibilities of data and computer systems, which will enable joint submissions and maximum gains from the results-based code.

Results-Based Forest and Range Practices Regime: Companion Document 9

Evidentiary Base to Support a Resource Development Permit

This document is to encourage stakeholder and public discussion of the issues surrounding the base of evidence that forest licensees are expected to provide in support of their Resource Development Permit submissions.

Introduction

The RDP is one of the three components of the legal framework of the proposed results-based regime. Legally binding land use zones and objectives, and stand-level results and rules are the other components. The RDP is the only statutory approval mechanism for forest harvesting and related activities in the proposed regime.

In order to conduct forest harvesting and related activities, a forest licensee will be required to submit a proposed RDP to the District Manager. The District Manager must issue the RDP if it meets the legal content requirements and four tests defined in the regime. The licensee proponent will be required to submit sufficient information or an "evidentiary base" to satisfy the District Manager that the four tests have been met. A number of questions are being asked about this requirement, such as how much information is needed, how detailed it must be and whether there will be variation from one district manager to another.

Overview Considerations

The key principle of the results-based regime is that licensees will manage the risks associated with achieving specified results, and that government will hold licensees accountable for achieving those results. Some important objectives of the results-based regime are to:

- reduce the costs and complexity of the current regime for both licensees and government;
- provide forest licensees with greater freedom to manage along with greater responsibility and accountability for results; and,
- maintain high environmental standards and a balance between social, environmental and economic interests.

These factors should be kept in mind when assessing the evidentiary base required to satisfy the District Manager. If licensees are asked to provide too much information so all risks are avoided, this would run contrary to the key principle and the objectives to provide licensees with freedom to manage and to reduce costs. The District Manager needs enough evidence to ensure an RDP will pass these tests and meet the regime's objective to balance social, environmental and economic interests. The evidentiary base is for the RDP tests only, and should not be used to try to address issues or reduce risks outside the realm of the tests.

The standard of proof required to satisfy the District Manager and the evidentiary base required to support the RDP submission will vary with the degree of risk of a negative outcome. In particular, where the consequences of a negative outcome are severe, such as where human safety is threatened or a critical environmental objective may be compromised, a stronger body of evidence will be required.

BRITISH COLUMBIA

First Nations issues are not specifically addressed in the RDP tests. Licensees will be required to consult with First Nations communities and interested groups and individuals as part of the general public consultation requirement. Government retains the legal requirement to consult with First Nations and meet its other legal obligations with respect to aboriginal rights.

Content Requirements

In keeping with the principle and objectives of the results-based regime, the RDP content requirements are simplified from the extensive requirements of current operational plans. The proposed RDP must contain a signing authority signature and maps showing topographical reference points and the outer boundaries of proposed forest development units. The maps must be of a scale and format satisfactory to the District Manager.

The content and format of this mapped information will not be prescribed in regulation. Licensees will choose a map format to present portions of their evidentiary base to best demonstrate that the RDP tests have been met. This information would have to be prepared to a standard that is meaningful to the District Manager in assessing the tests. It is anticipated that an open dialogue will occur between the District Manager and licensees to identify the appropriate scale and standards for mapping. Preliminary indications are that the simplified mapping requirements of the results-based regime present a cost-saving opportunity to both industry and government.

RDP Test #1: No Conflict with Third-Party Rights

The intent of this test is to avoid issuing authority for forest development activities where these would conflict with existing tenures or other legal rights. In simple terms, a check for overlapping rights and tenures is required. Where an overlap is found, an assessment of whether there is a conflict is needed. In many cases, overlapping tenures do not conflict; they may in fact be mutually beneficial. A conflict only occurs where the proposed forest development would prevent the exercise of other legal rights.

Currently, the Ministry of Forests obtains a Clearance Report before issuing permits. Overlapping rights are assessed for conflict and if a conflict cannot be resolved, the permit is denied. Under the results-based regime, a licensee will be required to provide evidence to demonstrate that the proposed development units do not conflict with other legal rights. The process will likely be to obtain a clearance report, identify overlapping rights and assess these for conflict. Any development units that create conflict that cannot be resolved would have to be removed from the proposed RDP before submission.

In this case, under the results-based regime, licensees would take responsibility for a process currently conducted by government. In return for having taken responsibility for this process, however, licensees can expect a streamlined approval process and greater certainty.

The evidentiary package for this test might be:

- a statement that clearance reports had been obtained for all development units in the RDP;
- a listing of overlapping tenures identified;
- a description of the process used to assess the overlapping tenures for conflict; and,
- if appropriate, descriptions of how potential conflicts have been resolved.

In circumstances of conflict, the District Manager may consider evidence that an agreement has been reached between the parties. Any such agreement must remain within the jurisdiction of the parties. Private companies, for example, do not have the jurisdiction to reserve or protect Crown lands or timber. In keeping with the principle and objectives of the results-based regime, copies of all clearance reports for checking should not normally be required. Exceptions may be appropriate in areas of particularly complex or active land use.

Since an RDP could have a term of up to five years, there can be a long time lag between when the licensee checks for conflicts as part of the RDP issuance process and the actual harvesting. This is of particular concern in the northeast area of the province where oil and gas developments can occur

on a very compressed time frame. It is important to note that a final check for potential conflict will occur at the cutting permit/road permit issuance stage as part of the licensee's desire to exercise their option to develop the area.

RDP Test #2: Meets Objectives for Land Use Zones

This test will determine if the proposed locations of development units meet the legal objectives for land use zones in which they occur. In most cases, the Ministry of Sustainable Resource Management will establish clear, spatially explicit and measurable land use zones and objectives. There are relatively few places in the province where these zones and objectives are ready for immediate establishment. During the transition period, until these are established, key values will be protected by interim objectives that will be established by any of the three agencies (MSRM, MOF, WLAP) where required.

It is difficult to assess the evidentiary package needed to determine if the test is met because with few exceptions, zones with sufficient detail and measurable objectives have not been established. Appendix 1 of the discussion paper lists 14 potential Land Use Zones and Objectives for the Results-Based Forest and Range Practices Regime. Not all of these potential objectives will apply to all areas. Until there is considerable progress in the development of the objectives it will not be possible to strictly define the evidentiary package.

In the discussion paper, there are eight cross-references to this RDP test in the individual management regimes. Before issuing an RDP, the District Manager must be satisfied that the RDP is consistent with any legally established objectives for the following factors.

1. Retention of Old Forest
2. Representation of other Seral Stages
3. Landscape Connectivity
4. Temporal and Spatial Distribution of Cut-blocks
5. Forest Road Access Management
6. Ungulate Winter Range
7. Identified Wildlife
8. Lakeshore Management

In the absence of objectives, interim objectives will apply to the retention of old forest. Interim objectives consistent with current agreements, that balance conservation with timber supply objectives, may be established for Ungulate Winter Range and identified wildlife. For temporal and spatial distribution, cut-block size limits will apply unless legal objectives have been set or the licensee has developed a landscape design to emulate natural disturbance patterns. Implementation of the other four cross-references will require the establishment of legal objectives.

The evidentiary information for seral stage representation and temporal and spatial distribution of cut-blocks will be the most complex. Landscape unit analysis is required and this is most effectively accomplished with sophisticated geographic information systems. The task is further complicated by the need to consolidate information from all activities within a landscape unit. A co-operative working relationship and data sharing agreement between licensees can facilitate the compilation of the evidentiary information. The situation will be most challenging where there are numerous licensees operating in an area. There are a number of working examples in the province where forest development plans have effectively incorporated evidentiary information on seral stage representation and temporal and spatial distribution of cut-blocks.

The District Manager will have the authority to establish proportional old-growth targets for multiple licensees operating in one zone. This will address the risk of one licensee adversely impacting other companies by "using up" the harvesting opportunity in a zone where there are multiple operators. The evidentiary information and the test will apply to the known circumstances at the point of RDP issuance. All existing and approved development units at the time of the issuance determination, along with the development units in the proposed RDP must be assessed against the objective.

RDP Test #3: Appropriate Public Consultation

An RDP must demonstrate that the licensee followed an appropriate consultation process to gather and consider information from communities and other members of the public. In contrast to the current process of review and comment, the results-based regime requires that the public be consulted before and during the preparation of the RDP. The specific consultation tools and methods will not be prescribed. Licensees would be encouraged to employ a variety of methods suited to their local communities and circumstances.

The evidentiary package would have to describe the process employed, provide a summary of input received, and outline how the input was considered. This is very similar to what has been required for forest development plans for a number of years but specific methods will not be prescribed in law. Licensees will be allowed flexibility in terms of the process and evidence.

RDP Test #4: Hazards in Designated Watersheds

For designated community watersheds and watersheds with significant downstream fisheries values, the District Manager must be satisfied that the licensee has identified terrain hazards and cumulative hydrological impacts and proposed development units that will not result in further risks or impacts. This test applies only in very specific and limited circumstances. There are well-established methods of assessing terrain hazards and cumulative hydrologic impacts.

To pass this test, the licensee would submit a base of evidence to demonstrate that appropriate methods had been applied to identify potential terrain hazards and cumulative hydrological impacts. In addition the information would have to demonstrate that the intensity and location of development units was appropriate to avoid further risks or impacts. Typically this would involve the use of appropriate expertise and a commitment to apply the expert recommendations. In keeping with the application of professional reliance, government should not need to routinely receive and review assessments and recommendations prepared by professionals.

Conclusion

The current Forest Practices Code requires the approval of multiple operational plans to authorize forest management activities. Extensive content requirements are spelled out in regulation and in addition, the District Manager must be satisfied that the plan will adequately manage and conserve the forest resources of the area to which it applies. In contrast the proposed results-based regime will require a single RDP. Limited content requirements and specific tests will apply to the issuance of the RDP. These changes should provide the opportunity for significant cost savings for both industry and government.

There is a concern that the requirement for evidence that the tests have been met could be used in an attempt to replicate the mandatory assessments and stand level prescriptions of the current forest practices code. This is clearly not the intent of the results-based regime. The evidentiary base is bounded by:

- the specific tests to be met and only those tests;
- clear, spatially explicit and measurable objectives for land use zones;
- risks associated with negative outcome;
- principles of administrative law and rules of evidence.

The key principle of the results-based regime is that licensees have the freedom to manage risks associated with achieving specified results and that government will hold licensees for achieving those results. The concepts of professional reliance and accountability are to be applied. There is no need for government to routinely review the work of professionals. Policy guidance and change management initiatives will be required to ensure the principles of the results-based regime are fully and effectively implemented.

Developing a Legal Framework for the Results Based Code (RBC)[1]

Roberta Reader, Director
Compliance & Enforcement Branch[2]
November 9, 2001

PART 1 – FIRST PRINCIPLES

Principle 1: The legal framework acts as a constraint or "damper"

- Forest management requires innovation and creativity.
- Legislation (i.e. the legal framework or "the law") is used to limit the scope for innovation and creativity. In other words, the law acts as a constraint or "damper" by limiting choices.
- One of the goals of the RBC is to promote innovation and creativity. Accordingly, the dampening effect of the law must be limited to those circumstances where it is absolutely required in the public interest.

RBC	Current Code
Greater Scope for Innovation	**Less Scope for Innovation**
Greater Reliance on Stewardship	**Less Reliance on Stewardship**
Less Reliance on the Law	**Greater Reliance on the Law**

Principle 2: The legal framework for the RBC will constrain forest management in 2 ways:

a) by establishing "benchmarks" that must be achieved in order to obtain authorization to proceed with an activity; and

b) by prescribing the standards that must be met "on the ground" (i.e. the results that must be achieved or rules that must be followed) in carrying out this activity.

- Authorization focuses on the ***minimum assurances*** the government requires in order to authorize a certain type of activity, e.g. forestry, mining, oil and gas (O&G) development, etc. It is a "go/no go" decision. Once authorization is given, this part of the legal framework is "spent." It does not control or constrain how the authorized activity is carried out.
- The standards that must be met "on the ground" are the vehicle for controlling or constraining the authorized activity. These standards should be framed as
  - results (either ultimate results, interim results or "proxy" results), or
  - rules.
- These results and rules establish the ***minimum "deliverables"*** that must be achieved in carrying out the authorized activity.
- The most important consequence for failing to provide the minimum assurances required by the government to authorize an activity is ***refusal of that authorization***.

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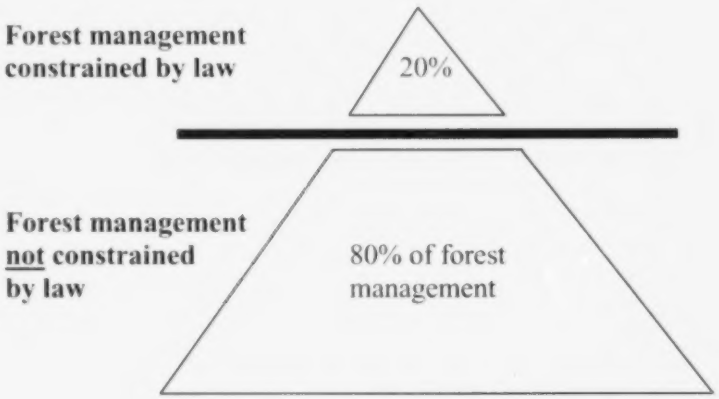
[1] This paper is based on the draft vision statement prepared by the Joint Management Committee (JMC) for the "one plan" model of the RBC. For an overview of the 3 components of the legal framework for the "one plan" model, see Part 2. JMC's draft vision statement is attached as Appendix 1 to this paper.

[2] This paper was prepared by the Compliance and Enforcement Branch at the request of the JMC. Its purpose is to assist the RBC Teams. Its contents should be interpreted as advice rather than direction.

- The most important consequence for failing to meet the minimum deliverables reflected in the prescribed standards is ***enforcement*** (supported by compliance actions where appropriate).

Principle 3: Construction of the legal framework should be based on an "80-20 rule"

- The law should never be overly intrusive or officious. It should only intrude where intervention is absolutely necessary in the public interest.
- In general, most of us can get through the day without worrying about the law, unless we have to drive a car. However, whenever we do get into the driver's seat of a car, we are very conscious of the power of the law to constrain or "dampen" our freedom of choice. The law limits our ability to choose our own preferred rate of speed, to decide whether or not to come to a "full stop" or a "rolling stop" at an intersection, etc. If this kind of constraint or "damper" were to control every aspect of our lives, it would soon become intolerable.
- In the context of the RBC, the recommended rule of thumb is to ensure the law does not intrude on more than 20% of the choices or decisions that are made in the forest management context. In other words, 80% of these choices and decisions should fall outside the controlling influence of the law. The law should only be the "tip of the iceberg."
- A decision to invoke the power of the law should be supported by a thorough risk analysis, i.e. legislative intervention should be demonstrably necessary in light of the identified risks to environmental, social or economic values.
- The purpose of this paper is to assist in the development of the legal framework that will govern the 20% of forest management choices and decisions that fall within the ambit of the law.



Principle 4: Legislated standards must be clear, precise and succinct – and crafted with an eye to enforcement

- One of the goals of the legal system is to ensure enforcement powers are not used lightly. To that end, there are a number of built-in safeguards that essentially "stack the deck" ***against*** the government. In particular, legislation that is unclear, imprecise or overly verbose is almost impossible to enforce.
- Legislated requirements must therefore be distilled into words that will pass the most onerous statutory interpretation tests. (NOTE: Most lawyers have on hand at least one or two thick textbooks summarizing these tests, which are both numerous and complex.)

- People who draft plans are not trained in legislative drafting techniques. Accordingly, it is seldom wise to rely on plans as the source of legislated requirements. For one thing, plans generally lack the clarity, precision and succinctness necessary for enforcement.
- Legislated requirements should be set out in the legislation itself (i.e. in the Act or a regulation). While there are certain drafting techniques that can be used to incorporate technical information found in a plan, these techniques must be used with care.

Principle 5: Legislation should not be used as a mere "communications tool"

- Legislation is a highly specialized tool. ***Its function is to make law.*** It should not be used for any other purpose. In particular, it should never be used as a kind of "communications tool" to convey the government's views on various matters.
- The Legislature makes law to affect (1) ***rights, powers or immunities***, or (2) ***duties, liabilities or requirements***. A legislative provision that does neither is alien to the legal mind; it doesn't "compute." Accordingly, if we try to use legislation as a mere communications tool, it will be transformed by the principles of statutory interpretation into something else – with sometimes starting results!
- For this reason, legislation should not be used as a kind of "vision statement" or reference manual to try to convey how we might like to see things done, e.g. by encouraging "best practices" or endorsing established practices.[3] It should focus instead on those areas that warrant the intervention of the state, i.e. those areas where it is absolutely necessary to affect (1) rights, powers or immunities, or (2) duties, liabilities or requirements.
- For example, as a general rule, recognized industry standards should not have to be transformed into laws. If 4 out of 5 foresters agree on a particular standard, i.e. if they accept it as a "standard practice" or "standard operating procedure," then it probably doesn't have to be turned into a legislated requirement. If the law is merely endorsing current practice, it adds nothing new to the equation. It does not warrant the intervention of the state.

Principle 6: The law is not a substitute for a commitment to stewardship

- The law will not ensure good forest management. At best, it will stop bad forest management.
- If it is used inappropriately, the law may actually impede good forest management by undermining a person's commitment to stewardship.
- Because the law limits choices, it can also forestall the use of more effective and innovative methodologies than those prescribed in legislation.
- Equally dangerous is the inappropriate use of the "trappings" of the law, e.g. by using quasi-legal language to describe non-legal "requirements." For example, if a forest company creates its own (non-legal) stewardship plan, in which it proposes results far above those prescribed by law, it should be encouraged to achieve these results. The judicious use of "measures of success" can be one way to provide this encouragement. However, in measuring the company's performance against these "measures of success," words like "failure" and "non-compliance" have no place. Such words should only be used to identify non-compliance with the law. Their use in other contexts will only dissuade companies from trying to do more than the law requires, i.e. they act as a "disincentive" in contexts where incentives might be far more effective.

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[3] This is not to suggest that the government should not express its views on such matters. It simply means that legislation is not the right tool for this purpose. See principles 1 and 6.

Principle 7: The more the government controls forest management decisions, the more it is bound by these decisions – and the greater its accountability for these decisions

- Freedom and accountability are inextricably linked. The more freedom a person is given to make his or her own choices and decisions, the more accountability he or she will bear for the consequences of those choices and decisions. Conversely, the less freedom a person is given to make his or her own choices and decisions, the less accountability he or she will bear for the consequences of those choices and decisions.
- For example, if a person is required by the RBC to achieve a specified result, he or she will be accountable for any failure to achieve this result, provided the legislation does not seek to constrain the choices and decisions that must be made along the way.
- However, if the legislation does seek to constrain these choices and decisions, e.g. by introducing a requirement to carry out certain kinds of assessments, the person's accountability will be lessened. In particular, if the person carries out the assessments prescribed by legislation, and these assessments fail to detect a risk that will prevent the achievement of the required result, he or she cannot be faulted for failing to detect this risk. Even if there are other methods for detecting this particular kind of risk, which might have been more effective in the circumstances, the legislated requirement overrides. By curtailing the person's freedom to choose the best way to detect the risk, the legislation limits his or her accountability. If, as a consequence, the specified result is not achieved, the government will be accountable for this failure.
- Similarly, when it comes to authorizing activities, the person seeking authorization is accountable for providing sufficient information (of sufficiently high quality) to satisfy the government that authorization should be given – provided the legislation does not limit his or her accountability by prescribing the kinds of information that must be provided.
- However, if the legislation does prescribe the kinds of information that must be provided (e.g. by specifying certain types of plans and/or the content requirements of these plans), then the person cannot be faulted for failing to provide information over and above that which is prescribed by legislation. For example, if the legislation requires the person to submit a plan describing his or her strategies for spotted owl habitat, he or she cannot be faulted for failing to include his or her strategies for marbled murrelet habitat. In particular, authorization could not be withheld on this ground. Once again, the legislated requirement overrides. By curtailing the person's freedom to choose what information to provide, the government has assumed the accountability for the information that is provided – and is bound by the consequences.

Principle 8: The RBC is not the preferred vehicle for regulating professional conduct or the use of professionals. While these may be important "process" issues from the standpoint of professional accountability, such matters should properly be left to the professional associations and/or the legislation that governs the conduct and/or use of professionals.

- Professional reliance and/or accountability is an issue between:
  - the professional (i.e. the forester, agrologist, engineer, biologist, etc);
  - his or her client or employer; and
  - his or her professional association.
- Requirements to use professionals (e.g. requirements to use foresters, agrologists, engineers, biologists, etc. to prepare certain kinds of assessments or plans) – as well as constraints on professional conduct (e.g. requirements to sign and seal assessments or plans) – should be

left to the legislation that governs that profession (e.g. the *Foresters Act*). It should not be necessary to duplicate these kinds of legislated requirements in the RBC.

- What's more, inclusion of these requirements in the RBC may have the unintended effect of shifting accountability (see Principle 7). This unintended effect could be avoided by leaving such matters to other Acts.

PART 2 – THE KEY COMPONENTS OF THE LEGAL FRAMEWORK

The legal framework for the "one plan" model of the RBC has 3 main components:

- Clear, precise and succinct land use objectives that identify permitted uses and the permitted intensity of these permitted uses;[4]
- An authorization mechanism that identifies the location of permitted activities (the "footprint"), i.e. the "one plan"; and
- The "on the ground" standards that must be met in carrying out these permitted activities.

Land Use Objectives	Authorization	"On the Ground" Standards
• Based on zonation of the land base (see Part 3) • Identifies permitted uses for each zone • Identifies permitted intensity of permitted uses • Must address uses regulated by RBC • Must have legal status • Must be established well in advance of authorization	• Identifies the location of the "footprint" (primarily cutblocks and roads) • Test for authorization must address minimum assurances required by government before activities can proceed • Primary function of the "one plan" (see Part 4)	• Specifies the minimum "deliverables" on the ground • Articulates these "deliverables" in the form of results (interim, ultimate or proxy results) or rules (see Part 5) • A limited number of technical details required to fully articulate these standards may be taken from the "one plan" (see Part 4)

PART 3 – SETTING LAND USE OBJECTIVES

One of the most significant challenges associated with the current Code is the lack of clear land use objectives. As a result, important land use decisions are being made at the same time that authorization is being sought to proceed with a particular activity in a particular area. By default, the person called upon to decide whether or not to give this authorization (e.g. by approving a forest development plan) is also called upon to make a de facto land use decision.

For the RBC to work, land use decisions must be clearly separated from authorization decisions. The processes for reaching these land use decisions may be varied[5] – and it may not be necessary to include these processes in the RBC (i.e. they could be "housed" in some other Act). However, in the end, the following components of a "land use plan" must find their way into the legal framework for the RBC:

- **Permitted Uses** (e.g. commercial recreation, forestry, ranching or range use, O&G development, mining, etc.);
- **Permitted Intensity** (e.g. amount of disturbance or impact, amount of interference with other uses, etc. that these permitted uses can cause); and
- **Preservation areas** (i.e. pre-determined and identifiable "no go" areas).

These are the "land use objectives" required to make the RBC work.

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[4] The importance of this first component of the legal framework cannot be overstated. ***The authorization mechanism, which is the second component of the legal framework, will not work if this first component fails to fulfil its function.*** See "Criteria for Approval" on page 10. See also Appendix 2.

[5] The government could base its land use decisions on everything from a LRMP or a Landscape Unit Plan to a licensee's "forest stewardship plan" or "sustainable forest management plan." Or it could create entirely new land use planning processes.

Defining Land Use Objectives

Land use planing may well serve purposes that fall outside the legal framework for the RBC. If so, these purposes should not conflict with the legal framework. For example, a land use plan should not try to impose planning requirements on licensees, and it should not try to by-pass to the legislative process for establishing the standards that must be met "on the ground." In other words, while "on the ground" standards may be tailored to suit different land use zones (see examples on page 14 and in Appendix 2), these standards are established through legislation rather than through the land use plan per se.

In addition, regardless of whatever other purposes a land use plan might serve, it must at, a minimum, support the legal framework for the RBC. To that end, the process for defining land use objectives ***must*** include the following stages:

1) Determine ***permitted uses*** and associated ***level of intensity***. For example low/high intensity forestry, low/high intensity commercial recreation, low/high intensity O&G development, etc.

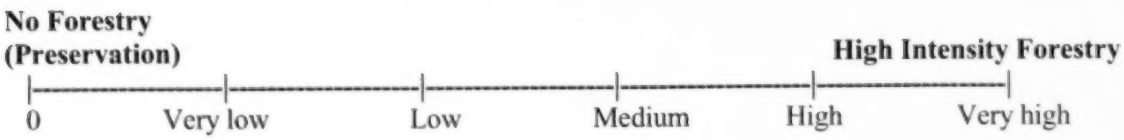
2) Verify ***compatibility*** of permitted uses and associated levels of intensity. For example high intensity forestry may not go with high intensity recreation, but it may go with high intensity mining.

3) Define ***parameters of intensity***, i.e. describe the key parameters that define the permitted level of intensity for the permitted use:
   a) Define ***activity/area specific intensity***. For example, specify maximum cutblock size, harvest type (clearcut, partial cut, etc.), or access limits (e.g. broad road access, minimal road access, etc.).
   b) Define ***permitted cumulative impact limit***. For example, the maximum disturbance for the entire zone may be capped at X%.
   c) Define required ***degree of dispersal*** where necessary. For example, it may be necessary to impose age class distribution limitations for wildlife, visual quality, etc.
   d) Address ***temporal issues*** where necessary. For example, it may be necessary to impose timing constraints to limit activity during the breeding season of certain wildlife species.

4) Identify ***"no go" zones or special zones*** that differ from the permitted use. This should be on a macro scale and could include things such as old growth management areas (OGMAs), ecological reserves, wildlife habitat areas, etc.

The result should be the kind of land use objectives that are needed to support the RBC. For example, a particular zone might be considered suitable for forestry. However, while some uses may be compatible with forestry (e.g. mining), others may not (e.g. commercial recreation). The process of balancing the competing social, economic, and environmental values associated with these various uses will ultimately dictate the intensity of forestry that will be permitted in the zone.

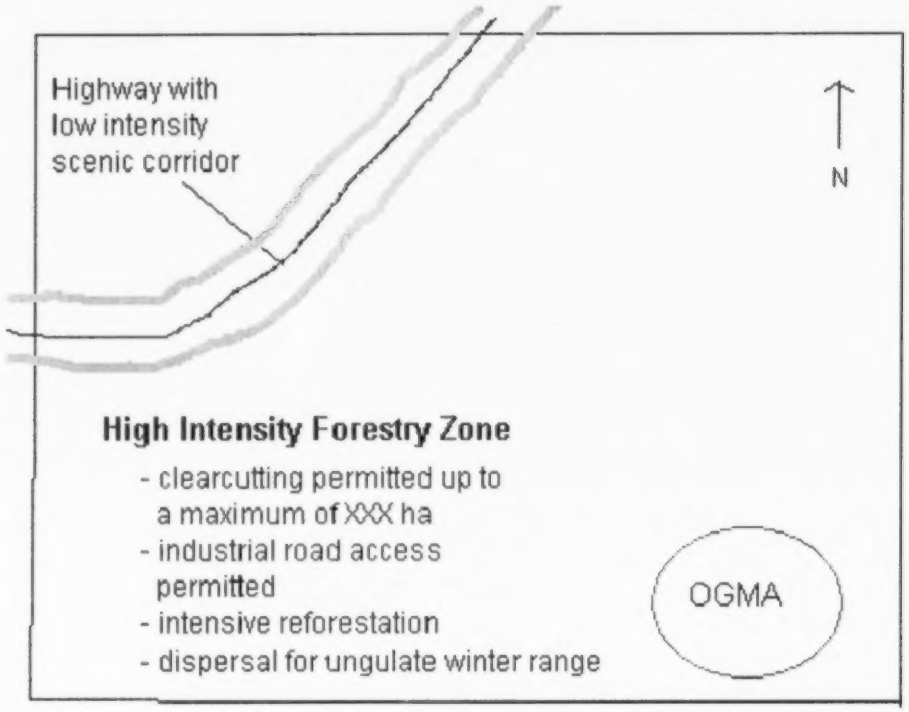
Example: Possible Levels of Intensity for Forestry



The next stage is to identify the specific parameters of the permitted level of intensity. Finally, any "no go" zones or special zones would have to be identified.

The end result would be a fully articulated set of land use objectives for the zone in question.

Example: High Intensity Forestry Zone



Establishing Land Use Objectives (Giving them Legal Status)

Land use objectives (or at least those objectives required for the legal framework for the RBC) must be established well in advance of authorization, i.e. they must have legal status before the "one plan" is prepared or submitted for approval. There are two main options for doing this in legislation.

Option 1: Create a "one stage" process where Cabinet or a minister establishes:

- the zone (i.e. the permitted uses and the intensity levels for these uses); and
- the specific parameters that define the permitted intensity levels.

Option 2: Create a "two stage" process where:

- Cabinet or a minister establishes the zone (i.e. the permitted uses and the intensity level for these uses); and
- a designated public servant, i.e. a statutory decision maker (SDM), establishes the specific parameters that define the permitted intensity levels.

Both of these options attempt to separate political (public policy) decisions that should be made by elected officials from the kinds of apolitical decisions that can properly be made by non-elected public servants. However, if the required political decisions are not made in a timely manner, the legal framework will require "default options."

Default Option 1: In the absence of legally established zones (with defined permitted uses and defined levels of intensity), the legislation could specify a "proxy" zone (with proxy permitted uses and proxy levels of intensity), which would be used solely for the purpose of authorizing activities governed by the RBC (i.e. through the approval of the "one plan"). For example, timber supply areas and tree farms licence areas might be specified (for the purposes of the RBC) as "default" high intensity forestry zones (in keeping with their purpose under the *Forest Act*). However, given the number and size of these areas, other options may be more appropriate.

Default Option 2: In the absence of legally established zones (with defined permitted uses and defined levels of intensity), the legislation could empower an "interim" SDM to establish "proxy" zones solely for the purpose of allowing the authorization of activities governed by the RBC (i.e. through the approval of the "one plan"). This SDM would have to be sufficiently motivated to exercise this extraordinary power. For that reason, the SDM charged with approving the "one plan" might be a logical choice. However, this power would have to be exercised well in advance of the submission of the "one plan" and would presumably survive only for the duration of that planning cycle.

It is important to note that neither of the default options is desirable. By their nature, default options are an admission that the preferred option has failed. However, there must be some kind of mechanism to establish land use objectives if the RBC is to work. Accordingly, when the preferred option does fail (as it inevitably will at some point), we need a default option that absolutely will not fail!

Of the two, the first default option is probably the most legally defensible. The second would expose the SDM to the same kinds of challenges that occur under the current Code with respect to the approval of forest development plans. However, by expressly authorizing the second default option in the legislation, the chances of surviving these challenges would hopefully increase.

PART 4 – AUTHORIZING THE "FOOTPRINT": APPROVING THE "ONE PLAN"

Purpose of the "one plan"

As the "one plan" name connotes, the RBC contemplates only one plan. There would no longer be any requirement in the legislation to submit silviculture prescriptions or any other form of site plan for approval. Consequently, the "one plan" may end up serving two purposes.

First, the "one plan" is the vehicle used to authorize the "footprint," i.e. the location of the activities to be authorized. These activities will fall into 3 main categories: (1) the removal of trees or forage; (2) reforestation; and (3) construction and/or deactivation of roads. These activities may be carried out by a forest company, a rancher, an O&G company, or a mining company. As such, constraints on the location of these activities may have to be tailored to reflect issues specific to these sectors.

Second, the "one plan" may be the vehicle for adding technical details required to fully articulate the "on the ground" standards that must be met when carrying out the authorized activities.

If the plan ends up serving both functions, then the SDM who approves the plan will be doing two things:

1. He or she will be authorizing the location of the activities laid out in the plan;[6] and
2. He or she will be approving the technical details that will become part of the standards.

Content of the "one plan"

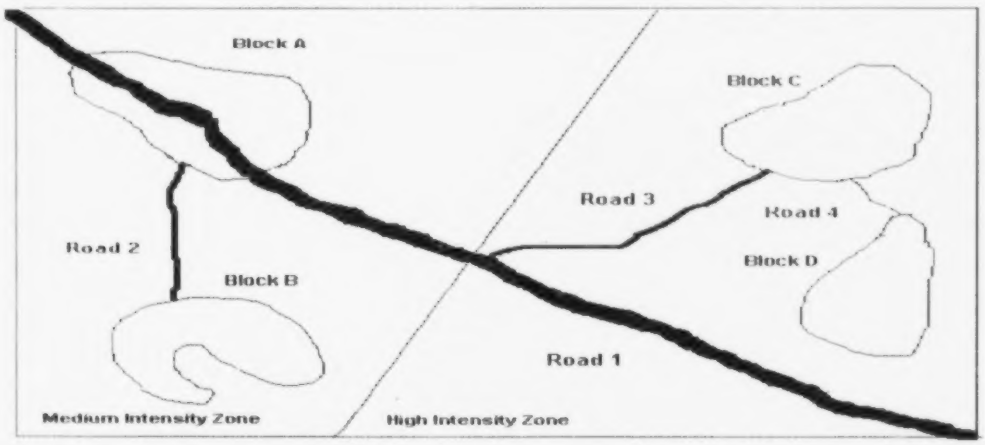
The content of the "one plan" will depend on whether it ends up serving both of the functions referred to above. For the purpose of authorizing the "footprint," a map (of a suitable scale) will be needed to identify the location of the proposed activities. For the purpose of adding technical details to the standards, tables may be needed that cross-reference the applicable sections of the Act or regulation.

Example: "One Plan" for a Forest Company

Assumption: There is a "Practices Regulation" that includes the following sections:

- Section 11 – requires identified basal area (%) to be retained
- Section 42 – requires certain species of trees to be left untouched (retained)
- Section 49 – requires identified species of trees to be used for reforestation
- Section 69 – imposes timing constraints
- Section 76 – requires roads to be built to different standards based on different road classes.

The "one plan" would include (1) a map, and (2) a set of tables for the cutblocks and roads.



[6] As a result, there may be no further need for cutting permits or road permits. This is one of the policy issues that will need to be addressed.

Block A	
Reg. Section	**Specified Requirement**
11	35%
42	Not Applicable
49	50% Douglas Fir, 50% Western Hemlock
69	Harvest in 2004

Block B	
Reg. Section	**Specified Requirement**
11	Not applicable *
42	Not Applicable
49	50% Douglas Fir, 50% Western Hemlock
69	Not applicable

* Because of the shape of the cutblock, basal area retention is not an issue.

Road 1	
Reg. Section	**Specified Requirement**
76	Class 1 (Main Access)

Road 4	
Reg. Section	**Specified Requirement**
76	Class 3

Approval of the Plan

1. Criteria for Approval (based on the view from the "hilltop")

If land use objectives have been properly set, there may be only four questions that will have to be answered:

1) Are the locations of the areas (and any specified requirements referred to in one of the tables described above) consistent with the permitted uses for the applicable land use zone, the permitted level of intensity and the parameters defining that permitted level of intensity? ***This criterion relies on the land use planning process to provide clear, precise and succinct land use objectives that identify permitted uses and the permitted intensity of these permitted uses.*** To that end, these land use objectives must establish (at least at the "macro" level) the right balance between competing social, economic and environmental values. (NOTE: Issues that arise at the site level should be addressed in the standards. See Part 5 and Appendix 2.)
2) Have third party rights been sorted out? This would include competing uses, multiple licensees operating in the same area, private property interests, etc.
3) Has the government's revenue/economic interests in the resource been addressed? This criterion would address a range of issues, such as ensuring isolated and/or degenerating stands are not left behind.
4) Has the plan gone through the requisite public involvement processes?[7]

[7] Deciding on what these public involvement processes should be is another policy issue that needs to be addressed.

2. Burden of Proof

The proponent of the plan (i.e. the licensee) should bear the burden of providing enough proof to satisfy the SDM that the criteria for approval have been met. The most effective way to do this is ***not*** to prescribe in legislation what kind of information (e.g. assessments, strategies, etc.) must be provided. See discussion in Part 1 – Principles 3 and 7.

In other words, forest management choices and decisions that are not dictated or governed by legislation serve an important function as ***evidence***. Choices and decisions that are dictated or governed by legislation are far less effective as evidence.

However, if Principles 3 and 7 in Part 1 are followed, this should not be a problem. The information that will serve as evidence should all fall within the 80% of forest management decisions and choices that are not constrained by law. This 80% component would include all of the licensees' forest management planning tools, e.g. stand level site plans, assessments, inventories, standard operating procedures, etc.

As such, the 80% component should be very effective as evidence for two purposes:

- at the "one plan" approval (authorization) stage, to satisfy the SDM that the criteria for approval have been met; and
- if a contravention subsequently occurs, to demonstrate whether or not the licensee exercised "due diligence" (see Part 6).

NOTE: When it comes to weighing evidence of this nature, it is sometimes helpful if the SDM provides non-binding guidance in the form of his or her "guiding principles." See, for example, the guiding principles that the Chief Forester has developed for weighing evidence in the context of an AAC determination. As a general rule, it is the factual information that a licensee is able to provide that is most important (e.g. assessments, inventories, etc.). Mere promises or "commitments" are unlikely to be given the same weight as "hard facts." Similarly, undue reliance on waivers and disclaimers may lessen the weight that is given to certain types of information (e.g. assessments, site plans, etc.).

3. May or Must Approve?

This is an important policy decision. A "may approve" test is significantly different from a "must approve" test.

May approve – the 4 criteria for approval referred to on page 10 merely establish the SDM's authority (jurisdiction) to approve the plan. In other words, they merely "open the door." It is now up to the SDM to decide whether or not he or she wishes to approve the plan. This would allow the SDM to establish additional criteria of his or her own, i.e. to take into account any other considerations he or she considers appropriate. NOTE: In essence, the "adequately manage and conserve" test in the current Code has achieved this result, i.e. it turns the "must" in section 41 into a "may" by introducing a test that allows the SDM to take into account additional considerations.

Must approve – the criteria for approval are the only consideration. The function of the SDM is simply to verify that these criteria are met. Once they are met, the plan is approved. NOTE: a "must" will only mean must if the criteria for approval are objective. ***If a test with a subjective element is introduced, such as the "adequately manage and conserve" test currently found in section 41 of the Code, then the "must" is really a "may."***

4. Opportunities to challenge the approval (authorization) decision

Must approve – If the approval test is a "must approve" test, it is likely that challenges would come most frequently from the following:

- **Licensees (proponents of the plans)** may challenge a decision not to approve the plan if the licensee is confident the criteria for approval have been met; and
- **Directly affected third parties** may challenge a decision to approve the plan if there is a case for arguing the second of the 4 criteria for approval (see page 10) has not been met.

Third parties who are not directly affected may also challenge the approval, however, if the test is a true "must approve" test, the chances of such a challenge succeeding are small.

NOTE: the avenue of challenge would be judicial review, unless the legislation provides for a statutory right of appeal. A right of appeal may be appropriate for licensees and ***directly affected*** third parties. Alternatively, it may be more effective to provide the SDM who approved (or did not approve) the plan with the power to revisit his or her decision within a set time (e.g. 30 days) based on additional information specifically provided for that purpose.

May Approve – If the approval test is a "may approve" test, almost anyone could challenge the approval and the outcome of the challenge would be uncertain, because of the broad discretion conferred by such a test – and the subjective nature of the evaluation.

NOTE: again, the avenue of challenge would be judicial review, unless the legislation provides for a statutory right of appeal. However, because of the subjective and discretionary nature of the "may approve" test, the consequences of providing for a right of appeal would be significant. At a minimum, whoever is charged with hearing such appeals would likely become the final arbiter of all plan approvals in B.C. (This is why there is no right of appeal from the Chief Forester's AAC determinations. An appeal from an AAC determination would make the person charged with hearing that appeal the final arbiter of AAC determinations in B.C.)

PART 5 – ESTABLISHING ENFORCEABLE STANDARDS (RESULTS AND RULES PRESCRIBED BY LAW)

Once the location of an activity has been approved (and the activity has therefore been authorized), the way in which that activity is carried out will be governed by the legislated standards that regulate that activity. The primary function of these standards is effective ***risk management***. This is done in two ways.

First, it is important to identify all of the important environmental, social or economic values that could be impacted by the activity in question. Where the risk to one of these values is of sufficient magnitude to warrant the intervention of the state, then a standard should be crafted to

minimize that risk. Such a standard may be crafted as a "result" (e.g. the licensee must establish a free-growing strand of trees) or a "rule" (e.g. no activity is permitted witnin 5 metres of a "resource feature"). The choice to go with a result (interim, ultimate or proxy) or a rule will depend on what is determined to be the most effective way to manage the value at risk.

Second, it important to apportion the risk of loss if things do not work out as planned. The suggested model is the shipping contract, which is the classic approach for pre-determining the allocation of risk of loss.

In a shipping contract, everything turns on the "point of delivery" specified in the contract. The seller bears the risk until the goods reach the point of delivery. If the goods are lost before they reach that point, it is does not matter whether the seller was a "good performer" or a "bad performer." He or she is liable for the loss. Similarly, once the goods have reached the point of delivery, the allocation of risk shifts to the buyer. If the goods are lost after this point, then the buyer bears the risk of loss.

In summary, standards (results or rules) should be calibrated to ensure:

- Values at risk are protected (where the value or the risk is of sufficient importance to warrant the intervention of the state); and
- The standard itself appropriately allocates the risk of loss by establishing a result or rule that is reasonable and fair in the circumstances. For example, requiring a licensee to maintain a stand for a full rotation period may be too onerous. Requiring the licensee to maintain the stand until it is "free-growing" may be more reasonable. Similarly, requiring a licensee to maintain a road that the licensee is no longer using (e.g. by not allowing the licensee to deactivate the road) may be too onerous. Requiring the licensee to maintain the road if the licensee plans to use it again within a set period (e.g. one year) may be more reasonable. Other examples of overly onerous standards might include stocking standards that are too high or site disturbance levels that are too low.

In this context, it is important to remember that the goal is ***not*** to try to manage "performance," i.e. by introducing process constraints that dictate the kinds of forest management planning tools a licensee must use (e.g. use of specified professionals for specified purposes, or specific kinds of assessments or site level plans meeting prescribed content requirements, etc.). The focus should be on what we want to see "on the ground." And, of course, standards should be crafted with an eye to all of the "first principles" discussed in Part 1. ***The standards are, after all, the focus of enforcement***. Which is why it is so important to avoid regulating "process" wherever possible.

The work of a compliance and enforcement (C&E) organization is carried out in the field, and the hallmark of an effective C&E organization is the field expertise of its staff. One of the most effective ways to draw on this field expertise is to ensure the standards that C&E staff are called

upon to enforce allow them to focus on what is actually happening on the ground. ***In contrast, "process" requirements tend to discount the importance of what happens on the ground; they dictate a "bureaucratic" mindset that marginalizes field knowledge and experience and ultimately undermines the credibility of C&E staff.***

Standards should also be consistent across different activities. For example, if two different activities both impact a particular value in the same way, then the same standard should probably apply to both. The exception would be where a conscious decision is made to manage the risk differently based on different type of activities. For example, the government may consciously choose to treat the mining industry differently from the forest industry. However, treating a forest company differently depending on whether it is carrying out harvesting, reforestation or road construction activities – i.e. where all of these activities represent the same risk to a value (e.g. riparian areas) – would be difficult to justify.

Having said this, it is quite possible that standards may have to be adjusted for different geographical areas or land use zones. This can be accomplished through a variety of means, such as the use of tables (e.g. within the body of a "Practices Regulation" or as an Appendix to a "Practices Regulation").

For example: Assume there are sections in a "Practices Regulation" that reference the following tables.

Standard	High Intensity Forestry Zone	Medium Intensity Forestry Zone	Low Intensity Forestry Zone
Basal Area Retention	20%	35%	55%

Standard	ESSF Zone	IDF Zone	ICH Zone
Regen. Delay			
Species Type			

Finally, well crafted standards should not normally require variances. The power to vary a standard is in essence the power to vary the law. It is far preferable to build sufficient flexibility into the legislated standards itself (e.g. by adjusting the standard to a level that will work for all licensees, by use of tables such as those shown above, or by the judicious use of technical information included in the "one plan" as described on pages 8-10).

If there is no other reasonable option, and the legislation must provide for variances, then the person designated as the SDM will likely have to visit the site in question (so allow time for field trips!) – and will have to provide a rationale for the variance. And, because the power to vary is a statutory decision, it can be challenged just like any other statutory decision.

PART 6 – THE ENFORCEMENT REGIME[8]

In the context of the RBC, the purpose of enforcement is two-fold. First, it ensures that the risk of loss is borne by the appropriate party. For example, if the legislation specifies that the risk of failure to establish a free-growing stand rests with the licensee, then the enforcement regime must ensure that the licensee does in fact bear this risk. This is the "compensatory" component of the administrative remedies regime, which includes remediation orders and "compensatory" monetary penalties.

Second, the enforcement regime ensures that poor performance is identified and addressed where appropriate. This is the deterrent component of the enforcement regime, which involves an evaluation of the licensee's performance based on a "due diligence" test. However, the enforcement regime's ability to address poor performance may be undermined if the legislation gets into process issues. In this context, decisions and choices that fall within the 80% component of forest management that is ***not*** dictated or governed by the legislation will play an important role as evidence of a licensee's due diligence.

Decisions and choices that fall within the 20% component of forest management that is constrained by the legislation will be much less effective for this purpose. As previously discussed, legislative intervention transfers accountability for these decisions and choices from the licensee to the government. In other words, by limiting a person's choices, legislation can also limit his or her accountability or liability for these choices. For this reason, it is strongly recommended that process issues be left to the performance evaluation (deterrent) component of the enforcement regime. And the best way to do this is to avoid pre-judging how these process issues should be resolved, i.e. by resisting the temptation to prescribe one particular "solution" in the legislation.

Most important of all, the standards that the enforcement regime is called upon to uphold must be ***realistic*** and ***achievable***. In other words, compliance with the law should be easily attainable by any reasonable, prudent person. Accordingly, before the proposed standards for the RBC are enacted as law, they must each go through one final check***: Would enforcement of this particular standard be unfair or unreasonable***? If the answer is "***Yes***," the proposed standard would make a bad law and should not be enacted.[9]

Finally, it is important to keep in mind the fact that the enforcement regime will have a direct bearing on the kind of compliance regime that can be used to supplement the enforcement regime.

Through an effective field presence, training or mentoring, inspections where appropriate, and the judicious use of compliance actions (e.g. compliance notices, warning tickets, etc.), C&E staff can, in many instances, achieve compliance without having to resort to enforcement actions. However, the ultimate goal of the compliance regime is the same as the ultimate goal of the enforcement regime: to ensure compliance with the law.

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[8] The enforcement regime will have a direct bearing on the kind of compliance regime that can be used to supplement the enforcement regime. See discussion below.

[9] But make no mistake, once a standard is enacted as law, it will be enforced. C&E staff will not second-guess the wisdom of the legislation.

For this reason, the compliance regime should not be confused with stewardship initiatives that try to promote standards that exceed minimum legal requirements. See discussion in Part 1 – Principle 6.

* * * *

Questions about the topics discussed in this paper may be referred to:

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- Greg Goss, Provincial Compliance Forester
- Jerry Hunter, Senior Advisor, Investigations and Enforcement
- Cassandra Mann, Special Projects Forester
- Jordan McKay, Senior Legislation and Policy Analyst
- Doug Kelly, Legislation and Policy Forester

Roberta Reader, Director
Compliance & Enforcement Branch[10]

November 9, 2001

[10] This paper was prepared by the Compliance and Enforcement Branch at the request of the JMC. Its purpose is to assist the RBC Teams. Its contents should be interpreted as advice rather than direction.

APPENDIX 1
Draft Vision for "One-Plan" Results Based Code[11]

Objectives for the Land Base (guides both non-legal and legal forest management framework)			
Non legal requirements (80% of forest management occurs here; still guided by objectives)	Legal requirement One plan (spatial requirements; the "footprint" one to two pages long)	Legal tests for Plan Authorization (guided by objectives and risk to spatially dependent resources)	Legally required standards (also guided by objectives; protects values not required to be protected through authorization)
• Plans, Strategies, etc. to guide forest management • Function in legal regime is to provide supporting evidence	• Map locating blocks and roads at scale adequate to authorize footprint. • Absolute minimum of numbers required for specified standards	For example: • 3rd party interests identified and addressed? • Seral stage distribution achieved?	• Results • Rules

← Results based Code →

Framework:

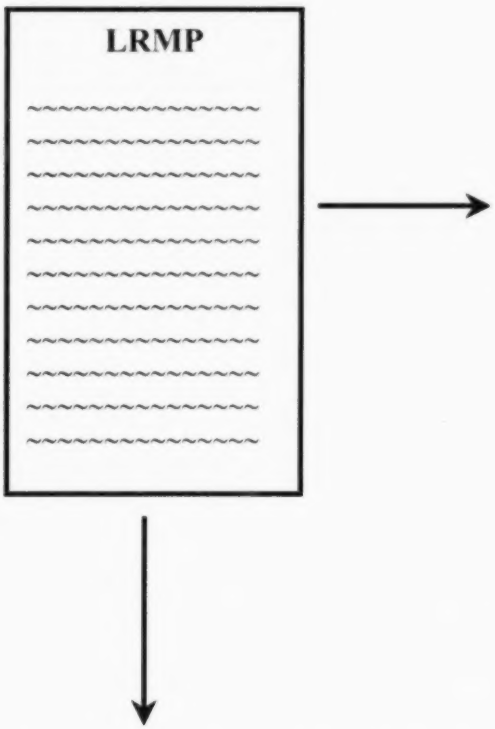
- Policy teams develop objectives, draft strategies and recommend standards (rules or results) for code values.
- Tests for plan authorization are restricted to ensuring that third party interests have been addressed and to values that must be considered spatially when the SDM is reviewing road and block locations (the one plan content).
- Values to be considered in plan approval must have clear objectives, as these will drive the development (or adoption) of strategies , being used by licensees to meet the tests for plan authorization.
- Objectives will flow from the following sources:
    - From higher level plans
    - From the policy teams for Provincial level objectives
    - From districts for area specific objectives, and
    - From licensees to achieve specific business goals

[11] The JMC gave this draft vision statement to the RBC Teams on October 9, 2001.

APPENDIX 2
Relationship Between Land Use Planning and the Legal Framework

Land Use Planning Process (Falls Outside the Legal Framework)

Government establishes a land use planning process. For example, it may decide to proceed via a LRMP or a Landscape Unit Plan – or it may use information from a licensee's "forest stewardship plan" or "sustainable forest management plan." Or it may initiate an entirely new and different land use planning process.



Land Use Objectives Established Pursuant to the Legal Framework

Clear, precise and succinct "location controls" for the "one plan" are given legal status – in accordance with the process laid out in the legislation – based on zonation of the land base

- Permitted Uses
- Permitted Intensity of Permitted Uses (e.g. Low Intensity Forestry, Medium Intensity Forestry, High Intensity Forestry)
- Parameters of Intensity (e.g. seral stage distribution parameters, cutblock size constraints, etc.)
- "No go" zones or special zones (e.g. OGMAs, wildlife habitat areas, scenic corridors, etc.)

These "location controls" will become an integral part of the test for approving the "one plan"

If Necessary, Stand Level Requirements Are Established as "On the Ground" Standards Pursuant to the Legal Framework

For example: Assume there is a "Practices Regulation" that references the following table:

Standards	Low Intensity Zone	Medium Intensity Zone	High Intensity Zone
Basal Area Retention	55%	35%	20%
Wildlife Tree Patches			
Canopy			
Etc.			